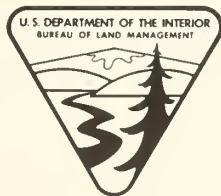




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Managing the Nation's Public Lands

*Annual Report of the Department of the Interior's
Bureau of Land Management
Fiscal Year 1992*



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PUBLIC LANDS IN THE WESTERN STATES



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Managing the Nation's Public Lands

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*Annual Report of the Department of the Interior's
Bureau of Land Management
Fiscal Year 1992*



This report to the Congress of the United States on the management of the Nation's public lands is submitted pursuant to requirements of the Federal Land Policy and Management Act of 1976 (FLPMA) and covers the period from October 1, 1991 through September 30, 1992.

Information on three special BLM initiatives, *Fish and Wildlife 2000*, *the Riparian Initiative for the 1990's*, and *Recreation 2000*, is presented in detail in the chapters titled *Fish and Wildlife*, *Riparian/Wetland Management*, and *Recreation*, at the request of Congress for the BLM to report annually on these initiatives.

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Department of the Interior

Mission Statement

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally-owned public lands and natural and cultural resources. This includes fostering wise use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that they are managed in the best interests of all our people. The Department also promotes the goals of the Take Pride in America campaign by encouraging stewardship and citizen responsibility of the public lands and promoting citizen participation in their care. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. Administration.

Bureau of Land Management

Mission Statement

The BLM is responsible for the stewardship of our public lands. It is committed to manage, protect, and improve these lands in a manner to serve the needs of the American people for all times. Management is based on the principles of multiple use and sustained yield of our Nation's resources within a framework of environmental responsibility and scientific technology. These resources include recreation; rangelands; timber; minerals; watersheds; fish and wildlife; wilderness; air; and scenic, scientific, and cultural values.

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Cover photographs

Clockwise from top left:

1. *Construction of Flagstaff Hill Visitor's Center in Arizona, 1992.*
2. *BLM's Yaquina Head National Outstanding Natural Area in Oregon.*
3. *Cultural resources in the BLM's Safford, Arizona, District.*
(Photo by Diane Drobka.)
4. *Floating on a Wild and Scenic River in New Mexico.*
(Photo by Guadalupe Martinez.)

Introduction

1992—A Year of Change in the BLM

The Bureau of Land Management, an agency within the U.S. Department of the Interior, manages 270 million acres of public lands for multiple uses. These include recreation, grazing, wildlife habitat, mining and energy development, cultural resources, wilderness, and timber harvest.

In 1992, BLM lands and programs generated over \$1 billion from such activities as oil and gas leases and timber sales. In addition, the BLM administered the distribution of close to \$100 million to States as payments in lieu of taxes in 1992.

In order to prepare the agency to meet the needs of the next quarter century, the BLM began a review of positions and operations in 1992. Special workgroups were established to review nine business processes to increase efficiency by eliminating duplication and streamlining processes.

Close to 100 positions were moved from the Washington Office to field locations across the country in order to put people closer to the resources. In addition, the National Wild Horse and Burro program was moved from Washington, D.C., to Nevada, where the majority of wild horses and burros are located.

A new executive position was established—Assistant Director for Resource Protection—to oversee the BLM's Fire and Law Enforcement programs, including the National Interagency Fire Center located in Boise, Idaho. This fifth Assistant Directorship, organizationally under the Washington, D.C., headquarters office, is physically located in Boise.

A new International Affairs Staff was created in the Washington Office in recognition of the need for contact with people, technologies, and economies around the world.

Several changes were made to improve management of oil and gas operations and to enhance onshore oil production on the public lands in 1992.

The BLM reduced royalty rates for stripper oil well properties to encourage operators to get the maximum amount of economically recoverable oil from existing wells with little new environmental impact. This is expected to boost production by 4.7 million barrels per year, ultimately yielding



Volunteers perform living history vignettes at the Oregon Trail Interpretive Center which opened in 1992.

\$3.3 million in additional revenues to the Federal government while assisting employment stability in the industry.

Another change will help avoid costly delays for oil and gas operators. The BLM will allow decisions on applications to drill to remain in effect when an appeal is filed unless the filer of the appeal can show justification that a stay is necessary. Appeals that lacked merit have in the past caused delays of up to two years. Because of the extensive regulatory requirements preceding oil and gas leasing, the environmental impacts of these oil and gas operations are thoroughly reviewed by the BLM before the lease is issued.

More stringent management plans for the harvest of Pacific yew bark took effect in the spring, as the BLM responded to a need for taxol, a cancer fighting chemical contained in the bark of the yew tree which grows in Northwest forests. In August, the BLM proposed new resource management plans for managing forests in Western Oregon through the 1990's, focusing on whole forest ecosystems instead of single species or timber production.

In Oregon, the BLM opened the National Historic Oregon Trail Interpretive Center near Baker City, which tells the overland emigrant story and allows visitors to experience a part of the trail in an historic setting. In Alaska, the BLM opened the first of several planned recreation facilities along the Dalton Highway. These sites are being funded through the new Intermodal Surface Transportation Efficiency Act of 1991.

The 50th Back Country Byway—the Pony Express Trail—was dedicated in Utah in September. This byway traces 133 miles of the famous trail through rugged Utah rangeland, connecting historic inns and forts and offering interpretive exhibits and recreational opportunities along the way. Also in 1992, the number of Watchable Wildlife viewing sites topped



A new Assistant Director for Resource Protection will oversee the BLM's law enforcement and fire programs as well as the Boise Interagency Fire Center. Here, law enforcement ranger Dick Godwin of the BLM's Grand Junction District in Colorado, surveys the public lands.

200 in the Western States, and National Fishing Week saw a record number of BLM activities engaging over 6,000 participants nationwide.

In the continuing *Adventures in the Past* program, the BLM sponsored the "High Plains Tribute" in 1992, focusing on the culture and heritage of the High Plains in Wyoming and Montana. The BLM also is tapping into children's curiosity about archaeology to teach critical science skills and instill in students an appreciation for America's rich cultural heritage through its *Heritage Education* program.

Technical expertise of BLM professionals is often called upon by communities and other Federal and State agencies around the country. In 1992, BLM geodesists in California used Global Positioning System technology when California State officials asked for assistance with damage assessment after the riots in Los Angeles in April. BLM special crews were sent to assist after Hurricane Andrew slammed into southern Florida and Louisiana in August, and again when Hurricane Iniki hit the Hawaiian Islands. BLM fire crews fought a record number of fires and helped local communities by saving wildland acres, structures, and lives in the summer. BLM has improved management for desert species, including the threatened desert tortoise and several endangered species of desert fish.

BLM law enforcement agents improved safety and security on the public lands by issuing thousands of citations, making hundreds of arrests and confiscating over \$100 million worth of illegal drugs in 1992. They also succeeded in obtaining a felony conviction of a Nevada resident for stealing and selling cultural artifacts taken from the public lands.

These are a few examples of accomplishments made by the nearly 10,000 people who make up the BLM.

Brief History of the BLM



Flagstaff Hill visitor's center in Arizona. The BLM places increased emphasis on educating the public about the West's cultural heritage.

In the last half of the 18th century and the first half of the 19th century, the United States Government acquired most of the land west of the Appalachian Mountains, eventually owning more than 1.5 billion acres that had never been in private ownership. The Federal Government has since titled most of this acreage to private citizens, industry, and State and local governments. Some of the public lands were dedicated to establish the national parks, national forests, national wildlife refuges, military compounds, and other government facilities. Approximately 270 million acres—about one-eighth of the Nation—remain today as public lands managed by the Secretary of the Interior through the Bureau of Land Management (BLM).

The BLM also manages the mineral estate underlying another 300 million acres of land administered or owned by other agencies or private interests. Most of this

acreage is located in the Western States, including Alaska, although small parcels are scattered across the Eastern States.

In 1812, Congress established the General Land Office to administer the public lands, with the primary purpose of passing public lands into private ownership. The passage of the Taylor Grazing Act in 1934 and establishment of the U.S. Grazing Service provided for active range management on the public lands, but this was seen as interim management pending final disposal into non-Federal ownership.

In 1946, the Grazing Service was merged with the General Land Office to create the BLM within the Department of the Interior. The BLM became responsible for managing all the resources on the Nation's public lands. However, with more than 2,000 unrelated and often conflicting laws pertaining to the public lands, the BLM had no unified legislative authority to manage those lands.

The Federal Land Policy and Management Act (FLPMA)

When Congress enacted the Federal Land Policy and Management Act of 1976 (FLPMA), it gave the BLM a legislative mandate and made the BLM a true multiple-use agency. The law recognized that public land is a national asset, providing goods, services, and vast natural resources for millions of Americans:

...Congress declares that it is the policy of the United States that ...the public lands be managed in a manner which recognizes the Nation's need for domestic sources of minerals, food, timber, and fiber from the public lands...

...the public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archaeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use... (FLPMA, Section 102[a][12] and 102[a][8])



Multiple-Use Management

Multiple use provides for the development of needed resources, while protecting other resource values from inadvertent damage or destruction. Through a process that balances alternative uses and involves the public at all steps, the BLM can provide opportunities for many different uses of the public lands and ensure that its many resources will remain available in the future.

American citizens can play a critical role in public land management—today and into the future. The BLM encourages all citizens to learn more about its public lands, to become involved in its management, and to enjoy the opportunities afforded by multiple-use management.

Key Natural Resources Managed by the BLM

The BLM manages:

- **Recreational Areas:** Thousands of unique recreational areas, including 32 Wild and Scenic Rivers, 29 National Trails, 726 developed and semi-developed recreation sites, 2,381 day-use units and 22,366 family camping units, 65,000 miles of roads suitable for recreation travel, 4.1 million acres of lakes and reservoirs, 50 Back Country Byways stretching over 2,500 miles in 11 states, over 15 million acres located in specially designated areas such as National Conservation Areas, National Scenic Areas and National Outstanding Natural Areas;

- **Wildlife Habitat:** Habitat for one out of every five big game animals in the United States, including over 600,000 caribou, 1.5 million deer, 300,000 antelope, 160,000 elk and over 20,000 big-

horn sheep. Two hundred Watchable Wildlife Viewing Areas;

- **Wilderness:** More than 1.6 million acres of designated wilderness in 66 areas. Studies have been completed for an additional 26.6 million acres. The BLM has recommended that 9.7 million acres of Wilderness Study Areas be designated as wilderness areas and 16.8 million acres be released for other uses;

- **Rangelands:** About 170 million acres of public rangelands with over 19,000 permittees grazing livestock on these lands. BLM managed rangelands provide about 10 million animal unit months of forage to support about 4.3 million head of domestic livestock;

- **Wetlands:** More than 23 million acres of BLM-managed land is wetland;



Chama Wild and Scenic River in northeastern New Mexico.

- **Forests:** About 50 million acres of forested lands—22 million acres in Alaska and 28 million acres in 11 Western States. Since FY 1989, the BLM has planted 72 million trees. Trees sold from BLM lands in FY 1992 returned \$172 million to the U.S. Treasury and States;
- **Minerals:** The major portion of the undiscovered but geologically predictable domestic deposits of numerous strategic or important minerals, including: aluminum, antimony, beryllium, bismuth, cadmium, chromium, cobalt, copper, fluorspar, manganese, mercury, molybdenum, nickel, platinum group metals, silver, tungsten, and vanadium. In addition, BLM lands contain 60 percent of the nation's lead, 90 percent of its potash, 50 percent of its sodium and gold, 35 percent of its uranium and significant deposits of lead and zinc;
- **Land Resources:** Some 270 million acres of public land—about one-eighth of the total land surface of the United States. More than 3,000 new rights-of-way, land use permits, and leases are authorized each year by the BLM to provide for utility and transportation corridors and to meet the needs of commercial and municipal developments.
- **Archaeological and Historic Sites:** Caretaker of an estimated four million archaeological, historical, and paleontological properties. More than 400 archaeological and historical sites—encompassing 3,000 separate properties—are recorded in the National Register of Historic Places. In excess of 150,000 recorded properties with archaeological and historical significance are located on BLM managed public land;
- **Fishable Streams:** Nearly 169,000 miles of fishable streams containing steelhead trout, salmon, and other sport fish;
- **Land Survey System:** The rectangular land survey system encompassing 30 States (excluding the original 13 colonies, Texas, and Hawaii) that forms the basis for the legal definition of ownership rights for over 1.8 billion acres of land in the United States;
- **Oil Resources:** About 1.4 billion barrels of proven oil reserves and prospective sources of oil and gas on an undetermined portion of the 570 million acres of Federal mineral estate;
- **Natural Gas Reserves:** Approximately 12.5 trillion cubic feet of proven natural gas reserves;
- **Coal:** About one-third of the Nation's coal supply;
- **Geothermal Energy:** Prospective sources of geothermal energy on more than 55 million acres, plus two million acres of known geothermal resource areas;
- **Wild Horses and Burros:** Approximately 96 percent of all wild horses and burros managed, protected, and controlled under the Wild Free-Roaming Horse and Burro Act of 1971.

Renewable Resources

**Ecosystem /Biodiversity
Management
Science and Technology
Fish and Wildlife
Forestry**

**Rangelands
Riparian/Wetlands
Soil, Water, and Air Quality
Wild Horses and Burros**

Ecosystem/Biodiversity Management

Biodiversity issues cut across virtually all BLM land management programs. In order to keep this focus in the forefront, and to avoid duplication within the Bureau, the BLM created a new position in FY 1992—the Ecosystem Management/Biodiversity Coordinator. Organizationally, this position falls directly under the Assistant Director for Land and Renewable Resources, and is located in the BLM's Washington headquarters office.

The coordinator's job is to develop an ecologically sound biodiversity program for the BLM. A major component is communicating and participating with agencies and groups outside of the BLM as well as developing methods to better integrate the principles of biodiversity, ecosystem management, and sustainable development into the BLM's renewable and nonrenewable resource programs.

BLM programs currently addressing these principles in strategic plans include Forestry (*Forests, Our Growing Legacy*); Soil, Water and Air (*Riparian Initiative for the 1990's*), Wildlife (*Fish and Wildlife 2000*), and Rangelands (*Range of Our Vision*).



BLM fisheries biologist Brian Lubinski checks the receiver before flying over the Beaver Creek drainage to monitor radio signals. He has implanted transmitters in 20 Arctic grayling to learn where they go and what kind of winter habitat they choose.



BLM District Manager Bob Abbey helps a participant during a recent event at Remington Farms in Chestertown, Maryland.

In 1992, the BLM was a major contributor to *America's Biodiversity Strategy: Action to Conserve Species and Habitats*, a joint report prepared by the Department of the Interior and the Department of Agriculture. This report outlines major efforts taken in the United States to wisely use biological resources. The BLM also co-sponsored *Biodiversity in Managed Landscapes*, an international conference on biodiversity held July 13-17 in Sacramento, California.

In order to train BLM managers and other professionals, the BLM's Phoenix Training Center held two interagency sessions of *Meeting the Biodiversity Challenge: A Short Course for Managers*, and a pilot session of *Applied Biodiversity Conservation* for field personnel.

This new ecosystem management and focus on biodiversity will help the BLM plan for sustainable use of the public lands for many generations to come.

Science and Technology

The BLM supports and encourages scientific research for maintaining healthy and sustainable ecosystems capable of producing diverse resources. Although the BLM conducts some research in-house (the BLM's unique niche is applied interdisciplinary research), most research is accomplished through contracts with universities and by borrowing expertise from other Federal agencies or in laboratories managed by these agencies.

The majority of BLM-supported research is environmentally related, with an emphasis on habitat and ecosystem research. Some species-specific research is supported, particularly to address endangered species management or conflicts occurring between species and resource development.

Important BLM research projects currently under way focus on maintaining and restoring biological diversity, weed control, wildlife management and control, raptor ecology, endangered species biology, forest productivity, and environmental change.

Fish and Wildlife



A special fishing derby at the BLM Santa Cruz Lake Recreation Area near Santa Fe, New Mexico, was one of many special fishing events sponsored by the BLM during the year.

More than 3,000 species of wildlife and fish live on BLM lands, including 216 federally listed threatened and endangered species, and 1,200 candidate plant and animal species. The BLM continues to strive toward halting the decline of species, and is broadening its management activities on groups that have traditionally received little attention, such as nongame birds, warmwater fish, and species of upland game birds. *Fish and Wildlife 2000* is the BLM's comprehensive strategy for achieving these goals through the year 2000.

Partnerships

In 1992, the BLM entered into partnership agreements with many diverse organizations, enabling the BLM to stretch Federal appropri-

ated funds, involve concerned citizens, and accelerate management and recovery of millions of acres of habitat. A few of these partners are Shimano American Corporation, American Fisheries Society, American Birding Association, Berkley, Inc., and Bass Anglers Sportsman Society.

Threatened and Endangered Species

The goal of this component is to increase populations of threatened and endangered species on BLM lands, restore populations to historic levels, and stabilize populations of unlisted special status species to preclude the need to formally list them at a later date.

Special Status Plants

More than 56 federally listed threatened or endangered plant species occur on BLM land, while another 1,102 species are candidates for listing. The national strategy plan completed in 1992, *Management of Rare Plants and Natural Plant Communities*, provides the blueprint for conserving rare plants on BLM lands.

During 1992, the BLM expanded its field staff by hiring botanists in several States to inventory, monitor, and initiate management of these plants. The BLM also was assisted through Challenge Cost-Share agreements with the Montana Natural Heritage Program of The Nature Conservancy. Through this cooperative work, several species in Montana have been determined to be quite rare and are now being monitored for possible listing. Other plant species were found to be quite common and will be recommended for removal as Federal candidate species.

Threatened and Endangered Fish

In all, 42 fish listed as threatened or endangered occur on public lands managed by the BLM. Another 73 BLM sensitive species are either Federal candidates or State-listed.

The BLM released its *Special Status Fishes Habitat Management Strategy Plan* in May to guide the recovery of trout, springfish, and other selected species. This plan presents a 10-year agenda for improving the status of more than 100 special status fish species, including complete recovery of 11

listed fishes and reclassification of eight others from endangered to threatened. Activities described in the plan also should prevent the need to list 18 candidate fish species and to completely recover six others listed by State governments.

A number of the BLM's special status fish are trout. Some of these are federally listed as threatened, such as the Lahontan cutthroat. Once occurring in approximately 3,800 miles of streams in California, Nevada, and Oregon, this subspecies is now restricted to 304 miles. Many of the native species of the West are candidates for listing, such as the redband trout, Colorado cutthroat, Bear Lake cutthroat, bull trout, Bonneville cutthroat, and Montana Arctic grayling. Historically, all of these trout were abundant on public lands.

Northern Spotted Owl

The vast majority of habitat for the threatened northern spotted owl occurs in northern California and western Oregon. As part of the inventory process, BLM biologists joined biologists from Oregon State University and Forest Service research stations to band a total of 515 spotted owls on BLM-managed and adjacent lands, including 191 juveniles and 324 adults owls. Since 1983, 2,270 spotted owls have been banded on BLM lands in Oregon.

The BLM is learning more about these owls through a 10-year, \$4 million study begun in Oregon. The research project, coordinated through the BLM's Cooperative Research Center at Oregon State University, is designed to study the occupancy and

reproduction response of spotted owls to various habitat conditions. The goal is to identify conditions which provide stable or increasing owl populations.

Desert Tortoise

The BLM is implementing a rangewide plan for managing desert tortoise habitat. The desert tortoise is listed as threatened in the Mojave Desert portion of its range in the four-State area of Arizona, California, Nevada, and Utah.

The BLM has established the Management Oversight Group, which includes BLM State Directors and State fish and wildlife agency directors from the four States, the regional directors from three Fish and Wildlife Service regions, and a representative from the BLM's Washington Office, Division of Wildlife and Fisheries.

Habitat essential for the recovery of this species has been identified by each BLM State Office. Several hundred acres in the Desert Tortoise Natural Area and the Chuckwalla Bench Habitat Management Plan (HMP) area have been acquired.

A fatal, contagious respiratory disease is infecting more than 50 percent of adult tortoise populations. Efforts are under way to provide specific areas where tortoises will be protected from infection.

The BLM is working with officials from the City of Las Vegas and Clark County, Nevada, home builders, private conservation groups, and the Fish and Wildlife Service in developing a Habitat Conservation Plan to allow the continued urban expansion of Las

Vegas. The BLM is a member of the Fish and Wildlife Service's Recovery Team that is developing a draft recovery plan for the tortoise.

Wildlife Habitat Management

The goal of this component is to ensure a diversity of wildlife on the public lands by restoring, maintaining and enhancing habitat.

Nongame Birds

The BLM established a new position in 1992 to coordinate the *National Nongame Migratory Bird Initiative*. The position is part of the new Western Fish and Wildlife staff based in Boise, Idaho. The Coordinator also will serve as the liaison for the BLM and *Partners In Flight*, a joint Federal, State, and private initiative to conserve neotropical and other nongame migratory birds in North America, Mexico, and Central America.

More than 379 bird species, of which 210 are neotropical migratory species, were recorded at the San Pedro Riparian National Conservation Area in Arizona. This is the BLM's showcase effort in the international *Partners In Flight* program and the BLM's *Nongame Migratory Bird Habitat Conservation Strategy Plan*.

Watchable Wildlife

The BLM has designated 200 Watchable Wildlife viewing areas on public lands in Oregon, Montana, Nevada, Utah, Idaho, California, Washington, and North Dakota. Development is under way in several more States including Colorado, New Mexico, and Ari-

zona. The development of the BLM's *Watchable Wildlife Strategy Plan* and its implementation is a joint effort between the BLM's divisions of Wildlife and Fisheries and Recreation.

During 1992, the BLM cosponsored the first national Watchable Wildlife Conference in Missoula, Montana. In Idaho, the BLM hosted a 4-day seminar for 1,000 students, teachers, and parents at Dedication Point overlooking the Snake River Canyon. In Alaska, the BLM, with the assistance of Princess Tours and the Fish and Wildlife Service, is creating a Watchable Wildlife guide for the Dalton Highway, a wildlife wonderland with grizzly bears, moose, bands of Dall sheep, wolves and muskox.

Big Game

The BLM manages habitat on the public lands for big game such as deer, bighorn sheep, elk, and antelope. The BLM works closely with State Fish and Wildlife Departments, sportsman's organizations, and conservation and industry groups to conduct habitat improvement projects.

Examples of 1992 accomplishments include: planting over 125,000 shrub seedlings to improve mule deer winter ranges, constructing 100 new water sources for big game, improving more than 6,000 acres through prescribed burning, and modifying fences that were obstructing big game movements.

Also, the BLM hosted a meeting with representatives from the American Sheep Industry Association, the Western Association of Fish and Wildlife Agencies, the

Desert Bighorn Council, Foundation for North American Wild Sheep, and several wildlife veterinarians that resulted in new guidelines for domestic sheep grazing in desert bighorn habitats.

To address conflicts associated with increased elk populations, the BLM is working with the Rocky Mountain Elk Foundation, State wildlife agencies, and the livestock industry in developing workable strategies. The BLM also participated in a national meeting to address issues affecting the interaction of wildlife with domestic livestock.

To protect important habitats such as pronghorn fawning areas, BLM New Mexico, Marathon Oil, Chevron, and Conoco teamed up to develop a muffler to quiet the engines of nearby operating oil well pumps.

Upland Game Birds

More than 23 species of upland game birds, including several species of quail, grouse, chukar partridge, and wild turkeys, are found on BLM lands.

In Idaho's Coeur d'Alene District, 40 mountain quail were trapped, fitted with radio transmitters, and monitored to discern habitat use, nest site selection, seasonal movements, and home ranges. This research will be published as management guidelines for reestablishing and maintaining the mountain quail in Idaho.

In California, the BLM, with members from nine chapters of Quail Unlimited, has mapped and refurbished more than 700 guzzlers and 400 developed springs in the California desert. The BLM's Vale,

Oregon, District cooperated with The Nature Conservancy, Oregon Department of Fish and Wildlife, and Oregon State University, to reestablish Columbia sharp-tailed grouse in northeastern Oregon. During the last two years, the BLM and the Oregon Department of Fish and Wildlife have trapped approximately 75 grouse in Idaho and reintroduced them to their new home in northeastern Oregon.

Raptors (Birds of Prey)

An unusually large number of raptors reside on BLM lands. The BLM and cooperating organizations established the Raptor Research and Technical Assistance Center (RRTAC) in 1990. During 1992, the RRTAC staff completed an update of the *Raptor Habitat Management Strategy Plan*, provided technical assistance on nearly 400 inquiries for information, continued to serve on recovery teams for threatened and endangered raptors, and advised and participated in many professional organizations.

The majority of RRTAC's effort is focused on the five-year multidisciplinary research project on the Snake River Birds of Prey Area with the Idaho Army National Guard and the Department of the Army. The integration of data from five major studies has already enhanced computing and analytical capabilities, remote sensing, and geographic information systems.

BLM field biologists also are involved in implementing the *Raptor Habitat Strategy Plan* through a variety of studies and management activities.

Waterfowl Habitat

The major goal of the BLM's strategy plan, *Waterfowl Management on Public Lands*, is to manage 20 million acres of wetlands containing 225 key waterfowl areas. The BLM is also assisting in implementing the *North American Waterfowl Management Plan*. Waterfowl coordinators have been established in all BLM State Offices. The BLM's Pacific Flyway Waterfowl/Wetlands Administrator is spearheading implementation of the strategy plan in both the Pacific and Central flyways.

The BLM has enhanced and/or created more than 103,850 acres of waterfowl/wetland habitat in eight States, while another 2,550 acres of wetland projects are in various stages of development.

Fisheries Habitat Management

The goal of this component is to enhance fish habitat through management of the 168,697 miles of stream habitat and the 2.4 million acres of lakes and reservoirs under the BLM's jurisdiction.

Anadromous Fish Habitat

Significant progress has been made in implementing the national strategy plans relating to the BLM's fisheries resources: *Anadromous Fish Management* and *Fisheries Habitat Management*. The third, *Special Status Fish Management*, completed in 1992, is now being implemented.

In 1992, the BLM received a \$560,000 Congressional add-on for work in the Columbia and Snake

River Basins. Work has begun on modifying grazing and timber management plans to reach goals established in the Salem District. Over the next three years, the BLM will revise 175 grazing allotment plans in Oregon, 90 in Washington, and 85 in Idaho. Stream improvement has begun on 57 miles of the Salmon, Willamette, John Day, and Walla Walla Rivers.

BLM management for salmon, steelhead, and sea-run cutthroat has increased in intensity and importance all along the West Coast. For example, in California, the BLM has constructed a 3,400 foot long rearing channel along the Trinity River to enhance anadromous fish rearing habitat.

Resident Fish Habitat

Resident fish species include all species not classified as anadromous or as special status species. This year, the BLM broadened its focus on key recreational species, such as bass, that have traditionally received little attention.

The BLM and Forest Service received an \$800,000 challenge grant from the National Fish and Wildlife Foundation to speed implementation of a cooperative effort between the three organizations. Thirty-four watershed-level projects in 13 States are currently being implemented throughout the West with tremendous support of many partners.

In April 1992, the BLM teamed up with Anglers United, Arizona Game and Fish, California Department of Fish and Game, and the Bureau of Reclamation to launch the most ambitious fisheries improvement project ever undertaken. Six segments of Lake

Havasu are scheduled for fish habitat and access improvements over the next several years. Challenge cost share money was made available in 1992 from Anglers United, the National Fish and Wildlife Foundation, and private donors.

Recreational Fishing

The number of volunteers and participants at National Fishing Week events on BLM public lands nearly doubled between 1991 and 1992. Eleven of the 12 BLM State Offices held 32 special events providing free camping days, with more than 6,300 children and adults enjoying BLM-sponsored National Fishing Week activities. Young anglers were particularly successful at BLM's Eastern States Second Annual Kids Fishing Day held on the Occoquan River for 60 inner city children, and at a Special Kids Fishing Day held at Remington Farms in Chestertown, Maryland for physically and emotionally challenged kids.

Forestry



Volunteers plant trees along Marys River in the BLM's Elko, Nevada, District. The American Forestry Association and the National Fish and Wildlife Foundation helped fund the effort.

The BLM manages 50 million acres of forests located in the 12 Western States and Alaska. A new approach has broadened the forest management mission to stress management from a forest ecosystem or "Total Forest Management" (TFM) perspective.

Under this approach, new emphasis will be put on the care of woodlands as well as commercial forest lands while the BLM continues to provide products and services on a sustainable basis. The sale of forest products from lands administered by the BLM in 1992 generated over \$172 million. Forests are managed on a sustained yield basis.

Total Forest Management (TFM)

In June 1992, the BLM director announced the new TFM initiative directing the BLM to emphasize not only timber volume when planning timber sales but also to a greater extent, maintenance and enhancement of water quality; soil, fish and wildlife habitat; old growth; aesthetics; and recreation. Under TFM, clearcutting will be further restricted and will no longer be the first choice management tool. The TFM initiative is supported by the outreach effort initiated in 1990, *Forests, Our Growing Legacy*, and also will be reflected in the new 10-year Resource Management Plans for western Oregon, and other plans as they are revised or developed.

Set Asides

Four million acres of BLM forestland in the Lower 48 States is classified as productive commercial forestland. About 45 percent of this land is not available for harvest. It is set aside, or harvest is partially restricted, for such things as wilderness and special study areas, old growth reserves, habitat for rare and endangered species, or special wildlife and recreational values.

Forest Products

Commercial forests managed by the BLM provide a variety of products including lumber, house logs, fuelwood, mushrooms, ferns, posts and poles, pinon nuts, cones and berries. Recently, the bark from the Pacific yew tree has become an important forest product because it contains taxol, a chemical compound important in the treatment of certain cancers.

Pacific Yew and Cancer Treatment

Researchers with the National Cancer Institute have discovered that taxol has shown great promise in the successful treatment of ovarian cancer and other cancers. The Pacific yew occurs on BLM lands in Oregon, Washington, Idaho, and California. Large amounts of yew bark are required to produce enough taxol for the treatment of one patient. The BLM is actively engaged in efforts to successfully conserve, manage, and harvest the Pacific yew. The BLM's *Pacific Yew Comprehensive Management Strategy* will help provide a sustainable supply of yew for the medical community and ensure the continued existence of Pacific yew

in the ecosystem. Working together on this national issue, the BLM, along with the Forest Service, Oregon State University and the National Cancer Institute, sponsored a national conference on the Pacific yew in August 1992, in Corvallis, Oregon.

Forest Regeneration

Reforestation is required for reasons other than timber harvest, such as fire, windstorm, and insect and disease infestation. Although many forests regenerate naturally, the BLM plants trees where sites require more rapid reforestation or a certain species mix is desired. Improved technology in the growing and planting of seedlings has greatly increased the success of planting efforts. Reforestation success rates are in excess of 90 percent. Approximately 35,000 acres were planted on BLM lands with 17.5 million seedlings in 1992.

Forest Health and Biodiversity

The maintenance of species, their genetic diversity, and the habitats that support them is an integral part of the BLM's forest management activities. As knowledge increases, the opportunities for using forest management as a tool for creating and/or enhancing diversity while providing needed forest products is becoming increasingly evident. One way this is implemented is by more closely imitating natural events through forest development procedures such as controlling tree density by thinning as well as through timber sale planning and design. Concepts in forest health, biodiversity, and sustainable use cannot be separated.

A serious loss of trees is occurring due to insects and diseases in much of Northern California, Eastern Oregon, Idaho, and Alaska. These dead and dying trees can greatly increase risk of catastrophic wild fire and loss of forest product value. In many cases the BLM has increased efforts to salvage dead and dying timber and is evaluating the need for such things as tree density control to improve tree vigor, introduction of a more diverse species mix in planting areas, and prescribed fire to imitate natural processes of forest development.

ReLEAF projects

The "Global ReLEAF" program sponsored by American Forests has provided numerous opportunities for enhancing forest environments. In 1992, ReLEAF funds were used to restore streamside habitat in Nevada, restore native forest in New Mexico, start a nursery in Arizona, and replant a fire-damaged forest in Wyoming. The donated funds have been used to encourage "challenge grant" dollars from other sources. These dollars are being used to restore forests destroyed by such things as fire, windstorm, drought and disease. Global ReLEAF receives its funding from private citizens and businesses all over America.

Oregon RMP's

BLM Oregon released new draft Resource Management Plans (RMP) in August for public review and comment. These RMP's will provide overall forest management direction for six Western Oregon Districts. The plans strive to bal-

ance the need for forest resources and maintenance of a sustainable ecosystem. A *preferred alternative* combines the features of seven management alternatives most desired by BLM managers. The draft *preferred alternative* looks at the total forest on a landscape basis and enhances the development of old growth characteristics through new forestry techniques.

Court actions have presently halted the sale of timber in western Oregon pending the completion of these RMP's. Implementation of the plans is expected to start in October 1993. These RMP's will establish the level of timber harvest for the next decade. Timber sales will be designed in such a way as to minimize impact on the spotted owl and other threatened species, while also attempting to reduce the economic impact to timber-dependent communities. Volumes to be offered are expected to be reduced considerably in response to the spotted owl and old growth issues.

Rangeland Resources

Range improvement project in Nevada. This wind-powered mill pumps water for use by livestock and wildlife.



Congress has authorized grazing on Federal lands under three laws—the Taylor Grazing Act of 1934, the Federal Land Policy and Management Act of 1976 and the Public Rangelands Improvement Act of 1978.

The BLM administers livestock grazing on 22,000 allotments comprising nearly 165 million acres of public rangeland, mostly in 11 Western States. In 1992, more

than 19,000 permittees grazed livestock on BLM-managed lands. These ranchers typically use a mix of private, State and public rangelands because of the West's patchwork pattern of land ownership. The importance of public lands in this mix is shown by the fact that about one-third of the beef cattle in 11 Western States graze at least part of the year on public rangelands.

The BLM has found that the amount of public rangeland in good to excellent condition has more than doubled since 1936—from about 16 percent to 38 percent in 1992. During that same period, the amount of BLM rangeland in poor condition declined by more than half—from 36 percent to 13 percent. The public rangeland's improving condition is evidenced by increases in big game populations over the past three decades.

The principal objective of the BLM's range management program is to protect and improve rangeland resources for multiple uses. To develop sound land use plans, the agency works with range users and other interested parties at the national and local levels. After drafting land use plans and preparing environmental impact statements, the BLM implements management through grazing allotment management plans or coordinated activity plans. These plans identify grazing management prescriptions and other actions that are needed to achieve site-specific vegetation and other resource management objectives. The BLM prepared or revised 132 grazing activity plans during FY 1992.

Stewardship

The BLM's rangeland program includes the Experimental Stewardship Program, as authorized by the Public Rangelands Improvement Act of 1978. The purpose of the Experimental Stewardship Program is to improve range stewardship by promoting cooperation among Federal and State land management agencies, grazing permittees, conservation groups, universities, and other parties.

Permittees are also honored for good stewardship through the Secretary of the Interior's "Partners in the Public Spirit" awards program.

Grazing Fees

The current grazing fee formula was established by Congress in the Public Rangelands Improvement Act of 1978. The fee was \$1.92 per animal unit month (AUM) in 1992. (An AUM is the amount of forage consumed by one cow and her calf, one horse or five sheep in one month.)

The BLM collected \$18.5 million in grazing fees in FY 1992, up from \$18.1 million the previous year. The agency distributed \$3.2 million in grazing receipts back to States and counties in 1991, the most recent year for which statistics are available.

Range of Our Vision

In 1990, the BLM announced its *Range of Our Vision* strategy, which seeks to improve public lands. The strategy sets three goals for the agency to reach before or by the year 2009, the 75th anniversary of the Taylor Grazing Act. The goals are: (1) to get 75 percent of the riparian (streamside)-wetland areas on BLM lands into proper condition by 1997; (2) to achieve the highest ecological conditions on 40 percent of the public rangeland, amounting to 68 million acres; and (3) to reduce the amount of public rangeland that is in poor condition to 10 percent or less.

The BLM intends to accomplish these goals by completing ecological site inventories, developing allotment management or coordinated activity plans (which include

proper vegetation use and grazing prescriptions), installing needed range improvements, and by monitoring trends to determine whether management objectives are being achieved.

To fully realize the aims of *Range of Our Vision* requires the cooperation of public lands users, conservation groups, universities, and other interested parties, as well as the support of Congress and the public. The agency tries to earn that cooperation and support by documenting its rangeland work and highlighting its goals and successes.

In addressing the goals of *Range of Our Vision*, the BLM in FY 1992 inventoried 2.1 million acres and monitored 104 million acres of rangeland. Based on monitoring data, the agency issued 848 decisions or agreements on 10 million acres to amend or confirm permitted use levels.

The agency has developed 2,979 allotment and coordinated activity plans on 65 million acres, of which 648 plans on 17.5 million acres address riparian issues. The livestock grazing prescriptions of these plans are enhanced by the development of water facilities and fence construction, along with soil and vegetation treatments that are designed to achieve desired plant communities.

Pest Control

Weeds

Noxious weeds have infested six million acres of BLM land, and they are spreading at a rate of about 2,000 acres per day. Approximately 20,000 acres were treated

for noxious weeds in FY 1992, some of which are being managed by the introduction of predaceous insects. The BLM works with States and counties to control noxious weeds on public lands. The BLM is participating with other government agencies in integrated pest management (weed) research.

Grasshoppers

The BLM, in cooperation with the Department of Agriculture's Animal and Plant Health Inspection Service (APHIS), periodically initiates actions to control grasshoppers and other insects on public lands. APHIS applies control treatments when infestations reach epidemic levels. The BLM and APHIS are sponsoring research to develop alternative pest management techniques to prevent such epidemics.

Riparian/Wetland Management



BLM partners and volunteers help restore and maintain healthy riparian areas across the West.

The BLM administers 23.3 million acres of riparian (streamside)-wetland areas. These areas comprise 8.7 percent of the approximately 270 million acres of public lands managed by the BLM.

To protect these economically and environmentally valuable areas, the BLM several years ago launched the *Riparian-Wetland Initiative for the 1990's*. This program sets goals and strategies for the agency in its efforts to upgrade the ecological condition of riparian-wetland areas and to restore them to "proper functioning condition."

Proper Functioning Condition

Riparian-wetland areas are functioning properly when they exhibit healthy characteristics, such as (1) purifying water by removing sediments as water moves through; (2) reducing the risk of flood damage; (3) reducing streambank erosion;

(4) increasing available water by holding water in stream banks and aquifers; (5) maintaining instream flows and streambanks; (6) increasing ground water supplies; (7) supporting a diversity of wildlife and plant species; (8) maintaining habitat for healthy fish populations; (9) providing water, forage, and shade for livestock; and (10) creating opportunities for recreationists to fish, camp, picnic, and relax.

The Riparian-Wetland Initiative sets four major goals. They are:

- (1) To restore and maintain riparian-wetland areas so that at least 75 percent are in proper functioning condition by 1997. The objective in each case is to achieve proper functioning condition and to improve the area's ecological status.

- (2) To protect riparian-wetland areas and associated uplands through proper land management and by avoiding or mitigating negative impacts. The purpose is to protect, acquire and expand key areas so the BLM can manage them more effectively.
- (3) To carry out a riparian-wetland information and outreach program that includes training and research. The purpose is to raise awareness and understanding of the importance of healthy riparian-wetland areas by expanding the BLM's outreach and training programs.
- 4) To form new and maintain existing public-private partnerships. The purpose is to supplement and accelerate the agency's work by using non-Federal funds and volunteers to complete high-priority projects.

With the help of public land users (like ranchers and mining companies) and conservation groups (such as Ducks Unlimited, The Nature Conservancy and the Izaak Walton League), the BLM has been making progress toward each of those four goals. Also in FY 1992, the BLM completed numerous training, public outreach and research efforts to promote awareness of the importance of riparian-wetland areas and undertook high-priority riparian-wetland restoration projects through partnerships with public land users and conservation groups.

Future Management of Riparian-Wetland Areas

As the BLM works to achieve proper functioning condition on riparian-wetland areas, the agency is developing a bureau-wide standard for monitoring and reporting improvements in condition so it can better assess and document progress. The BLM is concentrating on inventory, planning, proper management, project development and maintenance, and monitoring. Future needs are being updated as more information becomes available.

A Summary of Accomplishments

The following summary of accomplishments, based on data collected through fiscal year 1992, shows how the agency is creating a healthier riparian-wetland ecosystem in the West. In 1992, the BLM:

- Completed 127 activity plans and prepared or revised an additional 14 resource management plans that dealt with riparian issues.
- Inventoried 5.04 million acres, including 4.8 million acres of wetlands in Alaska and 202,000 acres or 2,556 miles of riparian-wetlands in the contiguous Western States.
- Developed 509 riparian-wetland improvement projects.
- Maintained 508 existing riparian-wetland projects.
- Monitored 837 management plans with riparian-wetland objectives.
- Acquired 35,793 acres of riparian-wetland areas, primarily through land exchanges and donations.

- Honored three grazing associations, three individuals and two conservation groups with the special Riparian Stewardship Award, which recognizes those who help the BLM carry out its initiative.
- Managed 85 areas with riparian values through special partnerships, primarily with State and private cooperators.
- Completed numerous training, public outreach and research efforts to promote awareness of the importance of riparian-wetland areas.

Special Designations

The BLM identifies critical or unique riparian-wetland areas that would benefit from special designation through land-use planning or other processes. Special designations—such as Unique Waters, National Riparian Conservation Areas, Areas of Critical Environmental Concern (ACEC), or National Wild and Scenic Rivers (NWSR)—greatly benefit these kind of riparian-wetland areas. Ten riparian areas were designated for special management emphasis in 1992.

1992 Special Designations

State	District	Special Designation	Project Area
Arizona	Phoenix	ACEC	Virgin River
Arizona	Safford	ACEC	Gila Box
Arizona	Safford	ACEC	Turkey Creek
Arizona	Safford	ACEC	Guadalupe Canyon
Idaho	Boise	ACEC	Cottonwood Creek
Oregon	Vale	NWSR	North Fork Malheur River
Oregon	Vale	ACEC	South Fork Walla Walla River
Oregon	Burns	ACEC	Silver Creek
Utah	Salt Lake	ACEC	Laketown Canyon City
Utah	Cedar City	ACEC, NWSR	Dixie RMP

Acquisition and Expansion

The BLM acquires riparian-wetland areas through land exchanges, donations or purchases, especially in areas adjacent to Waterfowl Habitat Management Areas or in areas that are critical for threatened and endangered species. In 1992, the BLM acquired 24 key riparian-wetland areas in 11 Western States.

Outreach

In 1992, the BLM expanded its public outreach program through media contact and coverage, brochures, audio-visual exhibits, videos, and teaching material. The material was presented at workshops, conferences, and schools.

BLM, produced a video titled *Riparian and Wetland Management Part 2: Recovery at Work*. The video explains the complexity of riparian-wetland ecosystems and the agency's successes in rehabilitating these valuable areas.

Riparian Showcases

The BLM has established showcase areas in each BLM State to demonstrate that well-managed riparian areas can produce multiple-use benefits while remaining healthy. Showcase and demonstration areas are also being used for educational and scientific purposes. The most recently designated showcase areas are shown in the following table:

Showcase Areas Established in 1992

State	District	Showcase Area
California	Bakersfield	Cosumnes River Preserve
Colorado	Montrose	Alder Creek Common Allotment
Montana	Butte	Sage Creek
Nevada	Elko	Marys River
Nevada	Battle	Mill Creek Mountain
New Mexico	Albuquerque	Carrizo Canyon
New Mexico	Las Cruces	Percha Creek
Oregon	Medford	Jenny Creek
Oregon	Vale	Brogan Canyon
Oregon	Lakeview	Gerber Block

Partnerships

The BLM undertakes high-priority restoration projects through joint-funding ventures, such as the Challenge Cost Share Funding Program. Through its volunteer program, the agency seeks and receives assistance from individuals, public land users, and other groups concerned about riparian-wetland management. Partners include such groups as Ducks Unlimited, The Nature Conservancy, State cattle growers associations, the Associations of Conservation Districts, and the Grand Canyon Trust.

The BLM also encourages Federal, State and local interdisciplinary teams to be involved in all

aspects of riparian-wetland management. For example, in Utah, the Forest Service will assist in management of riparian stream segments in the Indian Creek Watershed. The BLM works with the U.S. Fish and Wildlife Service on initiatives outlined in their Wetlands Action Plan. The BLM joined with the U.S. Geological Survey, the Bureau of Reclamation, and others on water quality, hydrologic and geologic studies, and rehabilitation techniques related to riparian-wetland issues. The agency also coordinated its efforts with the U.S. Forest Service, the Soil Conservation Service (SCS), and other appropriate Federal and State agencies on land management aspects of riparian-wetland protection and enhancement activities.



The BLM in Idaho created this rock dam to improve spawning and rearing fish habitat in a riparian area on public lands.

Soil, Water and Air Quality

BLM employee checks acid rain monitoring equipment at Red Rock National Conservation Area in Nevada.



Soil Resource Mapping

The BLM gathered soil mapping information on 2.2 million acres of public lands in FY 1992.

Watershed Improvement

The BLM is finalizing a model comprehensive watershed management plan on Sagers Wash in Utah, where the primary issue is salinity discharge to the Colorado River. This plan will be used by other Colorado River Basin States to assist in the development of plans to improve watershed condition and control salinity.

Climate Monitoring and Data Applications

Climate monitoring activities provide information from over 200

remote locations where conventional sources of weather statistics are not available.

Acid Rain Monitoring

The BLM Acid Rain Monitoring Program operates 16 stations in nine Western States. These stations provide information about acid deposition trends in the West and throughout the United States. This information is used by the BLM, other land management agencies, the Environmental Protection Agency, and State and local governments.

Smoke Modeling

To help assure compliance with air quality standards from prescribed burning, the BLM continued to develop and refine computer models for predicting air quality impacts. Emphasis was placed on making these models more accurate and easier to use by field personnel who have no background in modeling. These models were used on over 35 major fires throughout the Western States.

Global Change Research Program

The BLM's Global Change Research Program addresses how managed and natural ecosystems in environmentally stressed areas, primarily the arid and semi-arid regions of the West, respond to climate change and other environmental factors. Through a combination of ecological process studies and long term measurements of

ecological response, the program assesses how climate and other changes at the local, landscape, and regional level may affect the biodiversity, sustainability, and productivity of rangelands, forests, wetlands, riparian areas and other sensitive ecosystems on the public lands.

The research program consists of six projects being conducted primarily in the Western United States. To implement the program, the BLM established cooperative research units with two Western universities and implemented assistance agreements with two other universities. About 60 percent of the work is conducted outside the BLM, while 40 percent is accomplished in-house by BLM scientists.

All six projects have been initiated and several are collecting data from various field sites.

The Washington Office Global Change Research Coordinator provides direction for the program and coordination with agencies within the Interior Department and other Federal agencies engaged in global change research. The BLM's Global Change Data Center facilitates the sharing of scientific information and standardization of data management.

At the international level, the BLM has undertaken a paired ecosystem study in Russia and Uzbekistan as part of the Intermountain Wilderness Ecosystem Study—one of the six projects. This project consists of four stations in four equivalent climatic zones in the United States and Asia. Stations monitor ecological responses of selected vegetation,

water quality, air quality, meteorology, and other sensitive indicators. The results will provide an opportunity for continental scale comparisons of ecosystem response to climate and other changes based on equivalent data sets.

The first Russian station was placed in operation about 70 miles north of Moscow.

Wild Horses and Burros



Interest runs high when adopted wild horses demonstrate their prowess for potential adopters at shows sponsored by the BLM.

Approximately 54,800 wild horses and burros roam the public lands administered by the BLM in 10 Western States. To maintain healthy herds of these animals, the BLM removes excess animals and places them in private care through an adoption program.

A strategic plan for management of wild horses and burros on public lands was approved in FY 1992. It incorporates the recommendations the National Wild Horse and Burro Advisory Board. The plan identifies long-range management goals, including

attainment of appropriate management levels on all herds within six years. Other goals include increased habitat management; improved efforts in the adoption program; increasing partnerships; and incorporating new research into the wild horse and burro program. The plan also incorporates management techniques to reduce wild horse reproductive rates. Planning was completed in 1992 for a pilot project to investigate the applicability of fertility control, to be initiated in early FY 1993.

This adoption program placed 8,095 animals in private care in FY 1992. Since the inception of the program in 1971, 107,868 wild horses and burros have been placed with individuals throughout the continental United States.

Wild horse and burro populations exceed the appropriate management levels in most herd areas. In FY 1992, the BLM removed 5,806 excess wild horses and 857 excess wild burros.

The BLM has adopted a selective wild horse removal policy in order to enhance the cost effectiveness of the adoption program. Only *adoptable* wild horses are placed in the adoption program. Older and unadoptable wild horses, which normally make up 10 to 20 percent of the animals captured, are returned to the public lands.

Presently, the BLM is maintaining about 2,500 unadoptable horses on two ranches in South Dakota and one in Oklahoma. The sanctuaries were started in 1988, and were to become financially self-sufficient after three years. Because they did not receive sufficient private funding, the BLM director decided in 1992 to close the sanctuaries. The BLM is working to place the remaining horses and go out for a competitive bid to pasture the remainder of the horses in FY 1993.

The BLM supplies wild horses for prison inmates to train at three prisons; Riverton, Wyoming; Susanville, California; and Canon City, Colorado. After training, the horses are then offered to the public for adoption.



The BLM Manages close to 55,000 wild horses.

Lands and Realty Management

**Lands and Realty Programs
Wilderness**

**Cultural Heritage
Recreation**



Elk on the public lands.

Lands and Realty Programs

These programs provide realty and other services associated with land transactions or land use authorizations necessary to support programs within the BLM and to assist individuals, communities or other government agencies outside of the BLM. This includes providing access to the public lands; granting rights-of-way or

special permits for use of the public lands; exchanging lands; and leasing, selling or buying land parcels.

The lands program also maintains records for all land owned by the United States, provides title and information services to the public, conducts appraisals, and is currently automating millions of records for easier retrieval and use.

Recent accomplishments include adjusting ownership of over 200,000 acres of private and Federal land to enhance riparian and wildlife habitat bureauwide; consolidating land inholdings in the Desert Tortoise Natural Area in California; withdrawing over 30,000 acres in the Bonneville Salt Flats of Utah; and selling over 77 acres of public land for community expansion at Las Vegas, Nevada.

Special Uses of the Public Lands

Land use authorizations or permits are required for some uses of the public lands. The BLM grants land use permits for such diverse projects as filming and conducting research. The BLM also leases public land for special purposes, such as agricultural production.

Recreation and Public Purposes

The Recreation and Public Purposes (R&PP) Act authorizes the BLM to provide land—either through sale or lease—to State and local governments or to nonprofit groups at a reduced price. This land must be used for public purposes, such as building schools, hospitals, parks, or—in the case of nonprofit groups—churches, shooting ranges, or other community projects. In FY 1992, the BLM granted 98 R&PP leases.

Land Sales

The BLM sells land to individuals and public entities at fair market value after it has been determined that the land is available for disposal. In FY 1992, 1,186 acres were sold.

Rights-of-Way

With the granting of rights-of-way, individuals and local and State governments can obtain authorizations to use the public lands for certain single uses. In FY 1992, the BLM authorized 2,904 new rights-of-way for facilities such as water and natural gas pipelines, electric transmission lines, roads, telephone lines, communication sites for radio or other broadcast facilities, hydropower facilities, and drainage ditches.

The Trans-Alaska Pipeline System (TAPS) crosses 368 miles of BLM lands in Alaska under a right-of-way grant. The Alyeska Pipeline Service Company, operator of TAPS, replaced 8.5 miles of mainland pipe in the Atigun River flood plain. In the summer of 1992, the project area was revegetated and three temporary camps were closed. The BLM and the State Pipeline Coordinator's Office (SPCO) monitored all design and construction for the project. In April 1992, the BLM and SPCO issued a joint monitoring manual for TAPS and began implementing the program.

The BLM Utah State Office issued a right-of-way grant to Northwest Pipeline Corporation to construct natural gas transmission pipelines and related facilities in six Western States on Federal lands managed by the BLM, Forest Service, Bureau of Reclamation, Corps of Engineers, and Department of the Army. Private, county, State and Indian Trust lands are also involved in the pipeline route.

Access, Acquisitions, Withdrawals

Public Land Access

The BLM provides access to public land by acquiring easements on non-Federal land for roads and trails. Access is provided to those lands that are important to BLM's resource management programs such as timber harvest, energy and mineral production, or recreation. This program has opened millions of acres of the public lands that otherwise would have been inaccessible.

In FY 1992, the BLM acquired 172 easements to provide access for fishing, hunting, timber harvests and wildlife enhancement projects Bureauwide.

Land and Water Conservation Fund and Other Acquisitions

The Land and Water Conservation Fund (LWCF) finances the acquisition of new Federal recreation and park lands such as National Recreation Areas, Wild and Scenic Rivers and Trails, and important wildlife habitat. The fund also is used to assist States in planning, acquisition and development of outdoor recreation opportunities. Money in the LWCF comes from motorboat fuel taxes, proceeds from the sale of surplus Federal property, and a portion of receipts from offshore oil and gas leasing. Several Federal agencies draw upon the LWCF to finance land acquisitions, including the National Park Service, Forest Service, Fish and Wildlife Service and the BLM.

The LWCF enables the BLM to acquire non-Federal land having nationally significant resources at fair market value. In land ex-

changes, the LWCF can be used to make equalization payments. It is also used to purchase interest on non-Federal land, such as a mineral interest on private land, in order to preserve natural resources.

Land exchanges must carry out specific projects authorized by Acts of Congress or support a land use plan concurred with by Congress. In 1992, the LWCF was used to acquire 1,594 acres of land through exchange. In 1992, the BLM purchased 25,950 acres of land or interests in land in support of BLM programs.

Withdrawals

Occasionally, the Secretary of the Interior withdraws land to protect it or to transfer it to another agency.

Through FLPMA, Congress has required the BLM to review certain existing public land withdrawals in the Western United States to ensure the withdrawal is still necessary. If it is not, the withdrawal can be revoked and the land restored to appropriate public land uses. For example, much public land has been withdrawn over the years to support Bureau of Reclamation hydropower and other projects. Because some anticipated projects were never authorized, the BLM is currently reviewing the withdrawals with the goal of restoring these unused withdrawn lands to public land status.

In FY 1992, 26 withdrawals involving 246,929 acres were approved by the Secretary of the Interior. Twenty-nine withdrawals were revoked, and 113,248 acres were returned to the administration of the BLM.

In addition, 402 withdrawal cases involving nearly 3,000 acres were reviewed and the findings of the review were submitted to the Department of the Interior, which will send them to the President and the Congress, as required by law.

Alaska Lands Program

The major focus of the Alaska Lands program is to convey land to the State of Alaska and to Alaska Native corporations, and to convey Native allotment parcels to Alaska natives. These Federal land conveyances are required by the Alaska Statehood Act and the Alaska Native Claims Settlement Act.

In 1992, the State of Alaska received title to over 1.5 million acres, and Alaska Native corporations received over 1 million acres of land. Title also was passed to 789 Native allotment parcels in 1992, under provisions of the 1906 Native Allotment Act. This provides individual Alaska Natives a personal allotment of 160 acres.

In addition, seven Public Land Orders were published in 1992 that made 680,253 acres available to satisfy State of Alaska entitlements. This is the first step in eventually conveying title to these lands to the State of Alaska.

The State has a total entitlement of about 104.5 million acres and had received 86.8 million acres as of September 30, 1992. Alaska Native corporations are due to receive a total of 45 million acres and have received 35.7 million.

Although the State and Native Corporations receive legal title to these lands, the BLM must officially survey and patent them.

About 105 million acres of this land remain to be surveyed and patented by the BLM.

Other Alaska Land Issues

Land use issues that received attention in 1992 included those relating to the Federal takeover of State subsistence management on Federal lands in Alaska. This has created a rare situation in that the Federal government must manage animals as well as habitat until a Federal-State impasse is resolved.

Land use plans for Federal lands along the Dalton Highway, which parallels the Trans-Alaska Pipeline, are now being implemented. In June, the BLM opened the Arctic Circle Wayside, the first of a series of roadside attractions explaining popular points of interest along the Dalton Highway, the only highway in the U.S. that crosses the Arctic Circle.

Wilderness

The BLM is one of four Federal agencies mandated by Congress to manage wilderness—defined in the 1964 Wilderness Act as “natural places, where human influence is essentially unnoticeable, that offer outstanding opportunities for solitude or primitive and unconfined recreation.” The three other agencies are the Forest Service, the National Park Service, and the U.S. Fish and Wildlife Service.

In October 1991, the Secretary of the Interior recommended to the President of the United States that 9,761,490 acres of BLM public lands in 11 Western States be added to the National Wilderness Preservation System and that 16,810,994 acres be released for uses other than wilderness.

This recommendation represented the culmination of a 15-year study that had been the main focus of the BLM's wilderness program since 1976. During that time, the BLM completed more than 90 separate studies and environmental impact statements to determine the wilderness potential of 860 separate Wilderness Study Areas (WSAs) encompassing more than 28 million acres. The agency finished all of the studies within the deadline established by Congress.



Honeycombs Wilderness Study Area in Oregon. The BLM manages these areas to preserve their wilderness characteristics.

Once the studies were completed, the emphasis of the BLM's Wilderness Program shifted from wilderness study and reporting to management of WSAs and designated Wilderness Areas. The President has forwarded the BLM's recommendations to Congress. Until Congress either designates the WSAs as wilderness or releases them for multiple use, the BLM is required to administer them under an Interim Management Policy designed to preserve wilderness characteristics.

Wilderness Management Plans

The BLM currently manages 66 designated Wilderness Areas encompassing approximately 1.6 million acres of public land in nine States. As of 1992, BLM offices in Arizona, Montana, New Mexico, Oregon, and Utah had completed, and were implementing, Wilderness Management Plans for 17 designated Wilderness Areas as follows:

Arizona:	Paria Canyon-Vermillion Cliffs, Aravaipa Canyon, Paiute, Beaver Dam Mountains, Grand Wash Cliffs, Mt. Trumbull, Mt. Logan, and Cottonwood Point.
Montana:	Bear Trap Canyon (Metcalf)
New Mexico:	Bisti, Cebolla, De-Na-Zin, West Malpais
Oregon:	Juniper Dunes, Table Rock
Utah:	Paria Canyon/Vermillion Cliffs, Paiute/Beaver Dam Mountains

BLM employees in Arizona are currently developing Wilderness Management Plans for 14 other designated Wilderness Areas—Dos Cabezas Mountain, East Cactus Plain, Hassayampa River Canyon, Hells Canyon, Mount Tipton, Muggins Mountain, North and South Maricopa Mountains, South Estrella, Table Top, Peloncillo Mountains, Wabayuma Peak, Woolsey Peak, and Signal Mountain. Those plans are scheduled to be completed in 1993 and 1994.

The BLM also has targeted 1993 and 1994 to begin developing Wilderness Management Plans for 18 designated Wilderness Areas in Arizona and Nevada. Those plans are scheduled for completion in 1994-1998.

Restoration

The BLM conducted major rehabilitation projects in designated Wilderness Areas in two States in 1992. In Arizona, the BLM removed a 2,100-gallon water storage tank, a water trough, and 21 lengths of pipeline left from an abandoned state Game & Fish Department project on Arrastra Mountain. In Oregon, the BLM conducted a major weed eradication project in the Juniper Dunes Wilderness Area.

The BLM also repairs some natural resource damage in WSAs to maintain wilderness suitability. In 1992, the BLM conducted rehabilitation projects in WSAs in Cali-

fornia, Colorado, New Mexico, Nevada, Oregon, and Utah.

Interim Management of WSAs

The BLM currently manages 773 Wilderness Study Areas (WSAs) that encompass approximately 26.6 million acres of public lands in 12 States. Until Congress enacts legislation, the BLM must protect the wilderness character of each WSA.

To accomplish this, the BLM has developed and implemented the *Interim Management Policy*

and Guidelines for Lands Under Wilderness Review. By law, more activities are allowed in WSAs than in designated Wilderness Areas, but activities that would compromise wilderness suitability are prohibited.

To ensure that wilderness suitability is maintained, the BLM patrols WSAs regularly. In 1992, 219 WSAs were monitored more than once a month, 316 WSAs were monitored once a month, and 192 WSAs were monitored periodically.

Partnerships

In 1992, the BLM formed 10 new partnerships with organizations such as the Boy Scouts of America and the Sierra Club to assist with Interim Management of WSAs in California, Colorado, Idaho, New Mexico, and Nevada.

In all, 969 volunteers contributed \$371,671 worth of labor and

materials to complete projects in designated Wilderness Areas and WSAs. Arizona, California, and New Mexico had the most active volunteer programs. Projects include fencing, trail maintenance, installation of wildlife water developments, and trash removal.

Challenge Cost Share

A total of five Challenge Cost Share Projects were completed in designated Wilderness Areas in Arizona, New Mexico, and Utah, while 11 Challenge Cost Share Projects were completed in WSAs in California, Colorado, Idaho, Montana, New Mexico, and Nevada. Partners with the BLM in the Challenge Cost Share Program contributed \$21,614 in labor and materials for projects in designated Wilderness Areas and \$51,100 in labor and materials for projects in WSAs.



Cultural Heritage



This petroglyph site at the Red Rock National Conservation Area in Nevada is one of many cultural resources managed by the BLM.

Intact cliff dwellings of the Anasazi culture that flourished 1,000 years ago.

The signature of William Clark, penned on a cliff wall while exploring the Northwest in the early 1800's.

Fossilized trackways unearthed in New Mexico's Robledo Mountains revealing amphibians, reptiles, and insects from the Early Permian Period—280 million years ago.

The Presidio of Santa Cruz de Terrenate, a fort in southeastern Arizona used by the Spanish at the time of the American Revolution.

The preserved remains of a young allosaur, predecessor of Tyrannosaurus Rex by 80 million years, found in Greybull, Wyoming.

These remnants of North American history, all located on public lands managed by the BLM, provide a record of humanity's presence in the New World. Yet they are among the estimated four million archaeological, historic, and paleontological properties harbored on the public lands, widely considered to constitute the Federal government's largest and scientifically most important body of cultural properties.*

In 1992, the BLM created the Division of Cultural Heritage to assure that the Nation's cultural resources are properly protected, enhanced, and interpreted for the American public.

The lands managed by the BLM have also produced more vertebrate paleontological specimens than any other source in the world.

* The term "Cultural Properties" refers to definite locations of past human activity or occupation. They include ancient Indian ruins, historic ghost towns, small scatters of arrowheads, stone tools, abandoned cross-country wagon trails, and World War II weapons.

Fossils of many of the best known dinosaurs, including Stegosaurus, Camasaurus, and Allosaurus, have been discovered on public lands.

Cultural Resource Management

Section 106 of the National Historic Preservation Act requires the BLM to consider the impact of proposed projects on any properties listed on or eligible for the National Register of Historic Places prior to approval. In 1992, the cultural resources program staff reviewed more than 9,000 land use applications for their effect on cultural properties. In addition, program staff members issued approximately 400 cultural resource use permits for non-collection survey and recordation, survey and limited testing, and excavation and removal on 500,000 acres of public lands. As a result, more than 9,000 new cultural properties were discovered and recorded and almost 1,500 were excavated or had data recovery performed on them.

In 1992, the BLM's cultural resource program spent approximately one third of its operating budget to manage and protect more than 10,000 significant historic and archaeological properties on the public lands. These include more than 3,200 properties on the National Register of Historic Places, 23 National Historic Landmarks, and 5 World Heritage properties. Management and protection activities included patrolling, monitoring, fencing, and installing interpretive and protective signing.

The BLM actively participates in the Department of the Interior's Museum Property Program,

launched in 1991 to strengthen control of, and accountability for, museum objects. In 1992, the BLM participated in a Department-wide survey to estimate the number of museum objects each Interior Department agency holds. The survey revealed that the BLM houses approximately 5.8 million historic and archaeological objects in agency facilities. Another 18 million objects recovered from public lands managed by the BLM are stored at more than 200 non-Federal repositories.

In 1992, the BLM also completed the Interior Department's "Checklist For Preservation, Protection, And Documentation Of Museum Property," which identifies material weaknesses in facilities that care for museum property. In addition, BLM employees served on an Interior Department Task Force charged with developing a new Departmental Manual section and handbook to guide management of museum property.

Heritage Education Program

The BLM's *Heritage Education* program, still in its infancy, seeks to instill appreciation of America's cultural legacy in schoolchildren across the Nation in grades K-12. Educational experiences and teaching resources are offered for the school setting as well as for "outdoor classrooms," museums, and other informal learning environments.

BLM field offices in several states have established partnership projects with schools, museums and other organizations.

The BLM also has prepared a 5-year strategy titled *A Plan to Edu-*

cate Young Americans About Their Nation's Rich Cultural Heritage.

The plan outlines 14 programs intended to promote excellence in education. Activities have been initiated to date in several of these program areas. Highlights include:

- An educational videotape featuring the "Teenage Mutant Ninja Turtles," which has been distributed to 1,200 schools across the country.
- "Project Archaeology," an activity guide for teachers.
- A cooperative agreement with the National Science Teachers Association for the publication of articles in their magazines for science teachers.

Adventures in the Past

The cultural resource program has developed a tourism strategy designed to promote public education and involvement in the protection of archaeological and historic sites. The strategy focuses on different regional, commemorative, and thematic events each year. In 1992, the strategy revolved around a regional event, the "High Plains Tribute" in Wyoming and Montana. In conjunction with this event, the BLM co-sponsored Wyoming Archaeology Week and the Oregon-California Trails Association's national convention. The BLM offered 12 Tourism Packages to facilitate public participation in these events. The packages included archaeology fairs, rock art workshops, excavations, lectures, and site tours.

In 1992, the BLM completed 94 new on-site interpretive projects. In Montana, the BLM developed an interpretive site at the confluence

of the Marias and Missouri Rivers. It explains three sites of historic interest—the City of Ophir, Fort Pigeon, and a Lewis and Clark campsite. The project includes an accessible trail, three interpretive signs on a knoll overlooking the site, and a parking area.

Paleontology

Some of the most scientifically significant paleontological discoveries have occurred on BLM public lands. These lands have also produced more vertebrate paleontological specimens for museums than any other source in the world. Many of the best known and earliest described dinosaurs such as *Apatosaurus*, *Stegosaurus*, *Camarasaurus*, *Allosaurus*, and *Diplodocus* have been discovered on the public lands managed by the BLM.

During 1992, the skeleton of a 300-pound, 9-foot-long giant ground sloth, one of the oldest mammal remains ever found in southern Nevada, was discovered near Devil Park close to the California-Nevada border. The specimen's recovery was a cooperative effort between the BLM and a Challenge Grant-Cost-Share arrangement with the San Bernardino County Museum, under a paleontological permit issued by the Nevada State Office. A curation agreement was signed between the BLM and the Nevada State Museum and Historical Society for all paleontological materials recovered from BLM land in the Las Vegas District. The agreement provides for professional housing, care, protection, and management of collections of fossils and associated

records. During 1993, a complete replica of the skeleton will be cast as part of the cooperative agreement with the museum in Redlands, California.

In Colorado, the Garden Park Fossil Area is one of the most significant Late Jurassic (130-150 million years ago) fossil locations in North America. The most famous fossils quarried from the Morrison Formation were specimens of such well-known dinosaurs as *Camarasaurus*, *Allosaurus*, *Ceratosaurus*, *Diplodocus*, *Haplocanthosaurus*, and *Stegosaurus*. Other vertebrates collected from the Morrison Formation include fish, turtles, crocodiles, rhynchocephalian lizards, and mammals. Since the 1870's, this area has continued to produce important paleontologic discoveries. This past summer, the most complete and articulated *Stegosaurus* skeletons ever located were excavated. This specimen, in an excellent state of preservation, is the largest excavated and contains only the second *Stegosaurus* skull ever found in the world. This project was a cooperative effort between the BLM, the Denver



The largest and probably the most complete stegosaurus skeleton ever found was airlifted from public lands in 1992, in the Garden Park Fossil Area north of Canon City, Colorado.

Museum of Natural History, and the U.S. Army which airlifted the specimen — 17,500 pounds — from “*Stegosaurus* Gulch.” Few other locations have produced so complete a record of Late Jurassic life. Intense project work at Garden Park has also led to the development of “state of the art” excavation techniques, such as early plaster wrapping, grid mapping applied to paleontology, and removal of bones encased in surrounding matrix to minimize damage. During 1993, the BLM will

continue to work with the Garden Park Paleontological Society to study proposals for building a National Visitor/Scientific Educational Center in Canon City

In Utah, the BLM's visitor center at the Cleveland-Lloyd Dinosaur Quarry contains numerous dinosaur bones from the Morrison Formation which corresponds to the golden age of dinosaurs during the Jurassic Period. More than 70 exhibits of dinosaur bones from this locality are scattered in 46 museums in 19 States and eight foreign countries.

In Oregon, the John Day Fossil beds contain one of the world's most complete records documenting the rise of mammal and flowering plants as the dominant life forms on earth today. The BLM continues to inventory and document these 5 million to 50 million-year-old deposits. Additionally, the BLM is involved in a cooperative cost-share project with the South Dakota School of Mines for inventory and locality assessment of Fossil Lake. This cost-share arrangement also includes a fellowship for the services of a paleontologist from the South Dakota School of Mines during the next ten months to assist the BLM in classifying the discoveries and crafting State policy for Fossil Lake.

In New Mexico, the BLM's Robledo Mountains contain dozens of sites attracting worldwide attention and arousing new scientific interest in the Permian period, the last age of the Paleozoic era. These fossilized footprint faunas, dubbed "Pelycosaur Heaven," display myriad trackways of reptiles,

amphibians, insects, gorgeous plant fossils, and some bone beds from 280 million years ago. In addition to its historic and educational endeavors, this museum could possibly house specimens collected and also serve as a research facility for the BLM, the volunteers involved in the Permian project, the Smithsonian's Museum of Natural History, and the Los Angeles County, Carnegie Museum and New Mexico Museum of Natural History.

Partnerships

In 1992, the BLM formed 68 new partnerships that resulted in more than 1,812 volunteers completing 102 cultural resources projects on the public lands worth more than \$1.2 million in labor and materials.

The BLM also completed a total of 81 Challenge Cost Share projects worth at least \$1.9 million in labor and materials. In New Mexico, the BLM had the most active program with 14 projects completed at a value of \$489,200.

Recreation



The "great orange wall," a 1,000 foot high cliff along the Gila River is one of many scenic attractions for those floating through the Gila Box Riparian National Conservation Area in Arizona.

Recreation 2000 provides a blueprint for the BLM to provide high quality service to visitors, maintain facilities in top condition, open new facilities where appropriate, and protect natural resources.

In 1992, the BLM continued to make strides in implementing *Recreation 2000* objectives while adding new components. The most significant new initiatives from a national perspective are:

- **Back Country Hikeways and Bikeways:** a partnership with Rodale Press to provide infor-

mation to the public about outstanding trails on the public lands.

- **National Mountain Biking Strategy:** the BLM's effort to establish policies and procedures to manage the skyrocketing sport of mountain biking on the public lands.
- **Tourism on Federal Lands:** BLM has signed a Memorandum of Understanding with several other Federal agencies, including the Commerce

Department's United States Travel and Tourism Administration (USTTA), to develop tourism on Federal lands.

Evidence for the success of Recreation 2000 can be found in the increase in the number of visitors to the public lands. In 1992, the BLM recorded 72 million visits to the public lands.

Visitor Information and Interpretation

The BLM has numerous attractions to entice visitors including 50 Backcountry Byways and about 200 Watchable Wildlife Sites. A major focus of the agency is to inform people about these opportunities, and to educate them on protecting natural resources on the public lands. The BLM uses a number of different methods to achieve this. In 1992, the BLM:

- Published 104 new maps and brochures.
- Updated and reprinted its popular *Recreation Guide to BLM Public Lands*.
- Established 41 new permanent information exhibits and displays in areas with high visitor traffic.
- Set up information booths at 108 trade and consumer shows throughout the country.
- Set up booths at 161 fairs across the country.
- Presented 185 environmental education programs to an estimated 53,565 people.

BLM offices in Arizona, California, Colorado, Nevada, Oregon, and Wyoming contributed funding for 15 market research studies to determine who visits the public

lands and what they expect. The BLM will use the information to develop and market outdoor recreation experiences to meet visitor expectations.

Recreation Showcases

The BLM launched 15 new Recreation Showcase projects in 1992 to focus attention on the agency's Recreation 2000 implementation efforts. The projects ranged from the annual "Rails-to-Trails" Festival for the Biz Johnson Trail held in California in June, to improvements at the Valley of Fires Recreation Area in New Mexico, where all campsites were converted to provide universal access and accommodate people with disabilities.

Visitor Centers/Contact Facilities

Visitor centers and other visitor contact facilities provide a central location close to the public lands for people to obtain maps and information. The Oregon Trail Interpretive Center at Flagstaff Hill, one of 31 visitor centers, contact facilities, and wayside exhibits the BLM operated in 1992, attracted more than 100,000 visitors in the first three months of operation.

Resource Protection and Monitoring

In 1992, the BLM completed 393 resource protection projects including closing sensitive areas to off-highway vehicles, restoring trails, installing sanitary facilities, constructing boat ramps, and removing trash.

Two types of BLM law enforcement officers, Rangers and Special

Agents, protect natural resources and ensure visitor safety on the public lands. In 1992, the BLM increased the number of law enforcement officers by 34 percent, from 152 to 204. BLM officers investigated 980 recreation related incidents during the year, and issued 3,125 citations for violations ranging from campsite littering to illegal commercial outfitting.

Tourism

Many communities are encouraging the BLM to offer tourism opportu-

visitor information kiosks throughout Idaho to producing an Oregon Driving Tour Guide with the Forest Service and the Oregon Tourism Division. The BLM also produced a number of maps and brochures in cooperation with tourism organizations such as the *Tucson Basin—A Natural Opportunity* recreation and travel guide in Arizona, the *Montana Recreation Guide*, and the *Visit the Bighorn Mountains* brochure in Wyoming.

Also in 1992, the BLM signed a Memorandum of Understanding



BLM engineers oversee construction of facilities such as this visitor center at Flagstaff Hills. Visitor centers and other recreation facilities promote tourism and help diversify local economies.

nities to help diversify their economies. The BLM participates in 136 State and local tourism organizations including Chambers of Commerce, State Tourism Boards, and regional Travel Councils.

In 1992, the BLM participated in 54 cooperative projects ranging from installing 10 interagency

with the U.S. Travel and Tourism Administration and several other Federal agencies committing the organizations to work together to boost rural economies across the country. This work will be a priority of the recreation program in 1993 and beyond.

Facilities

The BLM currently maintains 859 campgrounds, 1,999 trails covering 18,468 miles, 228 boat launch facilities, and 245 information kiosks. In 1992, the BLM built 16 campgrounds, 6 non-motorized trails that stretch 49 miles, 13 boat launch facilities, and 48 information kiosks.

In 1992, the BLM developed or renovated 84 sites to improve access for people with disabilities. These projects included resurfacing parking areas, trails, and campgrounds, and installing accessible restrooms, picnic tables, drinking fountains, and fishing docks.

Permits, Fees, and Concessions

In 1992, the BLM issued 79,046 camping permits; 41,453 day use permits; 4,812 Long Term Visitor Area permits; 1,538 Commercial Special Recreation permits; 344 Competitive Special Recreation permits; and 3,313 other Special Recreation permits. Fees charged for these permits generated \$1.9 million in revenue.

The BLM leased one new concession in 1992 to the Yosemite Natural History Association to service the new BLM Briceberg Visitor Center near Yosemite National Park.

Total revenue generated by concessions on public lands exceeded \$244,000. These funds are used to operate and maintain the areas where the fees are collected.

Partnerships

In 1992, the BLM developed successful partnerships with private companies such as Kennecott

Copper and Barrick-Mercur. These two firms helped fund the Pony Express Back Country Byway dedication and brochure in Utah.

Many BLM partnerships received national recognition. In Alaska, the BLM received an award from Senator Ted Stevens for the Arctic Circle Interpretive Exhibit. This was a joint effort with the Alaska State Department of Transportation, which put in a highway turnoff for the exhibit, and the Fairbanks Girl Scouts, who helped clean up and landscape the site. The BLM provided the four interpretive panels.

In Idaho, the BLM received the Chevron National Conservation Award for increasing public awareness, and cleaning up and rehabilitating the Boise Foothills. Partners with the BLM in this effort included the Boise Front Coalition, the Idaho State Department of Recreation, and the Idaho Fish and Game Department.

The BLM included partners in strategic planning and professional development efforts in addition to field projects. In 1992, the BLM participated in 37 workshops with partners.

Volunteers

In 1992, 10,640 BLM volunteers completed more than 400 projects at a value of approximately \$4.6 million in labor and materials. Volunteers helped on projects such as graffiti cleanup at Moon Rocks in Nevada, the construction of three miles of the Blue Ridge Trail in California, and the Carlsbad Cave Inventory in New Mexico.

Energy and Mineral Resources

Fluid Minerals Solid Minerals Mining Law

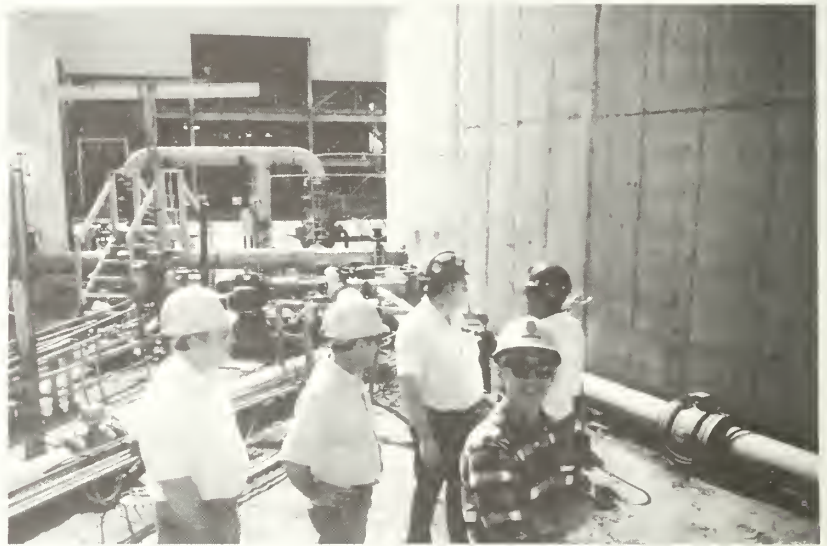
The BLM regulates and manages the exploration, development and extraction of minerals and energy

resources on some 570 million acres of Federal and Native American land. This is done in coordination with other Federal agencies, State and local governments, and industry and conservation groups.

In 1992, total receipts from BLM-managed energy and minerals operations exceeded \$1 billion. Much of this money goes back to State and local governments.

The BLM moved to boost oil productivity in 1992 by reducing royalty rates on stripper wells on Federal lands in order to put marginal or otherwise uneconomical wells back into production. This will promote development and encourage the maximum recovery of oil.

The agency also streamlined the system in 1992 by allowing decisions on applications for permission to drill (APDs) to remain in effect when an appeal is filed,



unless the filer of the appeal can show justification that a stay is necessary. This will help avoid costly delays in oil and gas operations that have already been thoroughly reviewed by the BLM and the public.

Fluid Minerals

Oil and Gas

The BLM's oil and gas leasing program is responsible for about 4 percent of domestic oil and 5 percent of domestic gas production.

The BLM holds competitive lease sales to offer oil and gas parcels to the public through oral auctions. Parcels that are not sold at these auctions are then available for a two-year period for non-competitive leasing.

In 1992, the BLM conducted competitive lease sales in which 7,500 parcels covering 7.9 million

acres were offered, with 2,500 parcels involving about 1.1 million acres receiving bids at the oral auctions. Bonus bids totaled \$17.5 million. Following the competitive sales, 5,000 parcels covering about 6.8 million acres were available for noncompetitive leasing in 1992.

As of September 30, 1992, there were 72,800 oil and gas leases in effect covering about 54.4 million acres.

The BLM also developed a Fluid Minerals Planning Handbook and will be developing additional guidance to supplement the BLM's NEPA Handbook.

As of September 30, 1992, there were about 23,000 producing leases with 56,000 producing wells on lands under supervision. Of these, 4,200 leases were located on Native American Indian lands. Together, the leases produced about 140

million barrels of oil and about 1.2 trillion cubic feet of gas in FY 1992.

Federal leases generated about \$600 million in royalties during FY 1992. Fifty percent (or in the case of Alaska, 90 percent) of this is returned to the States where production occurs. Payments also are distributed to Native American Indian tribes and individuals. The Minerals Management Service (MMS) collects and distributes these receipts.

The BLM also has continued its program to identify all wells that are potentially draining Federal and Native American Indian resources. During FY 1992, the drainage backlog was reduced from about 12,000 cases to about 10,000 cases, and most offices were moving toward resolving the identified drainage situations.

Inspection and Enforcement

In 1992, the BLM performed 48,000 inspection activities which resulted in the issuance of 8,516 notices of incidents of noncompliance, levied assessments totaling \$44,000 and civil penalties of \$5,735. Of the 48,000 inspection activities, 42,600 were conducted in accordance with the Federal Oil and Gas Royalty Management Act (FOGRMA).

Geothermal Energy

The BLM issues leases and regulates exploration and development of geothermal energy on the public lands.

In 1992, the BLM managed 72,800 oil and gas leases, covering over 54 million acres.



California is the world leader in geothermal energy production, and BLM-managed lands contribute to that production. California geothermal fields produced enough power in a year to meet the needs of more than two and a half million people. Geothermal energy produced in California accounts for 91 percent of total Federal production.

Exploration and development of geothermal resources is also conducted on BLM-lands in Nevada (7 percent) and Utah (2 percent).

Competitive leases issued in FY 1992 totaled nine covering 14,000 acres. Noncompetitive leases issued during FY 1992 totaled 34 covering 56,000 acres.

Geothermal production generated over 1,000 megawatts (MW) of power in FY 1992 from Federal lands, and geothermal leases and associated operations generated about \$19 million in bonus, rent and royalty payments to the Federal Government.

At the end of FY 1992, a total of 330 leases were in effect covering 900,000 acres

Solid Minerals

Coal

Almost two billion tons of coal have been produced from Federal land in the 71 years since the Mineral Leasing Act was enacted. The market value of this coal is nearly \$25 billion, on which royalties exceeding \$1.2 billion have been paid to the U.S. Treasury. Since 1920, more than 482 million tons of coal have been produced from Native American Indian lands. That coal was valued at more than \$5.2 billion and generated more

than \$384 million in revenue for Native American Indian tribes and allottees.

The BLM is the focal point for the Department of the Interior's Federal Coal Program and ensures coordination with State and local governments, industry, conservation groups, and other agencies concerned with the management of Federal coal.

Approximately 60 percent of the total Western reserves of coal is found on Federal land. Most of these Federal coal reserves are concentrated in six Western States: Colorado, Montana, New Mexico, North Dakota, Utah, and Wyoming. At the end of 1992, there were:

- approximately 13.63 billion tons of recoverable reserves on 476 Federal coal leases covering 694,340 acres.
- 133 producing Federal coal leases, which produced 262 million tons. This production represented almost 26 percent of the total United States production.
- \$284 million in Federal coal royalty revenues collected by the Department of the Interior. Coal production on Indian lands totaled about 40 million tons with royalties of over \$61 million.

During FY 1992, the BLM conducted three coal lease sales covering approximately 7,600 acres and containing approximately 800 million tons of recoverable coal reserves. The sales generated total bonus bids of approximately \$160 million.

The BLM administers 33 logical mining units (LMU's). An LMU is a designated area from which coal can be developed as a unit and as

part of a single mining operation, and may consist of Federal lease(s) only or of Federal lease(s) and non-Federal land (or Native American Indian land); it must be composed of contiguous lands, and cannot exceed 25,000 acres in size. During FY 1992, the BLM approved four of these 33 LMU's and 17 LMU applications were being processed.

Implementation of national Enforcement and Inspection (I&E) and Production Verification (PV) guidelines for coal and other solid minerals is carried out through Solid Minerals Assistance Teams (SMAT's).

Solid Nonenergy Leasable Minerals

The BLM supervises activities of lessees and permittees who explore for, develop, and produce non-coal solid leasable minerals on Federal and Indian lands. More than 87 percent of the acreage and nearly 80 percent of the leases for solid nonenergy leasable minerals on Federal lands involve potassium, sodium and phosphate.

At the end of FY 1992, there were 545 Federal leases comprising 637,200 acres, plus 110 prospecting permits covering 145,000 acres. In addition, there were 16 preference right lease applications covering 28,500 acres. The combined production of solid nonenergy leasable mineral commodities from Federal and Native American Indian land was valued at over \$900 million. More than \$32 million in royalty revenues was collected from Federal lands.

Mineral Materials

Mineral materials are salable minerals such as sand, gravel, stone or clay, generally used in construction or building projects. The BLM disposes of mineral materials either by sale to the general public or by free-use permit to qualified government or non-profit organizations. In FY 1992, about 6.2 million cubic yards of mineral materials, valued at approximately \$3.4 million, were produced from 2,860 sales and free-use permits.

To assist in the economic development of large tonnage mineral material deposits, in 1992 the BLM proposed lengthening the terms of competitive sale contracts from 10 to 15 years.

Mining Law

Approximately 80,000 new claims were accepted for recording by the BLM during FY 1992, compared to 78,000 for the previous year. The BLM issued 28 patents for lode, placer and millsite claims, for a total of 4,155 acres. There are about 1 million current claims.

Fire and Law Enforcement

RESOURCE PROTECTION: Fire and Aviation Management Law Enforcement

*The new
Sherpa C-23A,
part of the
BLM fleet used
in specialized
fire and law
enforcement
activities in the
lower 48 States
and Alaska.*



In 1992, the BLM's Fire and Law Enforcement Programs were transferred from Washington, D.C., to Boise, Idaho. A new position was established—the Assistant Director for Resource Protection—which consolidated all functions of the BLM's Fire and Aviation program, Law Enforcement program, and the National Interagency Fire Center (formally the Boise Interagency Fire Center) in Boise, Idaho.

Fire and Aviation Management

Prescribed Fire

Prescribed fire is an integral part of the fire program. The BLM conducted 387 individual burn projects on over 60,100 acres in

1992. Prescribed fires benefit the range, forestry and wildlife programs.

Wildfires

Fires occurred on land administered by the BLM at a record pace in 1992—2,660 fires burned 404,253 acres, of which over 270,000 acres burned in Idaho. While the number of fires set a record, the number of acres burned was slightly below average.

The combination of several years of drought and a dry winter and spring set the stage for a potentially severe fire season. Palmer Drought Indices were in the extreme category for most of the West, with some areas in the Northwest displaying near record levels.

The Alaskan winter experienced larger than normal snowpack and a later than normal breakup. This, combined with a very wet and cool summer, mitigated the fire season in the Arctic.

In June, a series of low pressure systems moved into the West and brought significant rain to certain areas. This precipitation tempered the early fire season and helped hold fire activity in check until July.

Fire activity increased in late July and August. A major storm in late August brought rain and snow to much of the West, aiding in the suppression of numerous fires.

Fire activity remained above average for most of the fall as September and October proved to be very dry, warm months. The end of October ushered in a major storm that essentially closed the 1992 fire season.

On August 24, Hurricane Andrew made landfall in Florida and on August 26, Louisiana was struck. A Type I incident management team was requested from the BLM by the Federal Emergency Management Agency (FEMA) on August 26 and another on August 30; both were sent to aid the cleanup efforts in Louisi-

ana. On September 11, Hurricane Iniki swept across the island of Kauai and on September 12, FEMA ordered a Type I team from the BLM to support its efforts in Hawaii.

As of October 30, a total of 87,368 fires were reported to BIFC and had consumed 2,033,609 acres. Wildlands were not the only loss, however, as 859 structures were also reported destroyed.

Aviation

The BLM completed the acquisition and operational deployment of five OV-10 Bronco and three C-23A Sherpa aircraft. These aircraft are being used in the highly specialized air attack, smokejumper, paracargo, logistical, and law enforcement functions of the BLM throughout the Lower 48 States and in Alaska.



Over 87,000 fires were reported in 1992, consuming over 2 million acres.

Law Enforcement

The BLM employs special agents and law enforcement rangers to enforce the laws on the public lands. In addition to their formal education, all law enforcement personnel hired by the BLM are required to complete intensive law enforcement training courses at the Federal Law Enforcement Training Center in Glynco, Georgia.

The BLM's law enforcement and resource protection program began in 1976 with the passage of FLPMA. The BLM enforces provisions of other laws including the Archaeological Resources Protection Act (ARPA), the Wild Horse and Burro Act, the Sikes Act, the National Trails Act, the National Land and Water Conservation Fund Act, and the Wild and Scenic Rivers Act.

The BLM's special agents, or criminal investigators, deal with serious crimes on the public lands. Special agents investigate criminal law violations using such techniques as surveillance, undercover work, and electronic monitoring.

An archaeological resource protection task force of BLM special agents and law enforcement officers of other agencies conducted numerous investigations of persons trafficking in illegally obtained archaeological resources in 1992. The task force made two arrests, obtained 17 Federal indictments, sought seven State complaints, seized 8,000 artifacts, received civil forfeiture of an estimated \$500,000 worth of artifacts, and obtained five convictions under ARPA. In an unrelated case, BLM special agents obtained a felony conviction under

ARPA of a Nevada man who was selling illegally obtained artifacts at a Portland, Oregon, show. In another action, BLM special agents completed a major investigation of an illegal disposal of hazardous waste resulting in a conviction under FLPMA and the collection of \$1.6 million in fines.

The BLM's rangers are the uniformed law enforcement presence on the public lands. Enforcing laws applicable on public lands and apprehending those who violate the laws are the main focus of a ranger's job. The number of apprehensions and citations issued are far too numerous to mention. Rangers issue over 2,000 citations a year for misdemeanor violations such as off-road vehicles in closed areas, firearms violations, illegal take of wildlife, firewood and forest product theft, trash dumping, and rules of conduct violations affecting public safety. The BLM also obtained conviction of adopters who had mistreated horses adopted through the BLM's horse adoption program.

In FY 1992, BLM special agents and law enforcement rangers continued efforts with other Federal, State and local agencies to eradicate illegal drugs from public land in California, Oregon and other Western States. The value of illegal drugs seized by the BLM in 1992 exceeded \$100 million. BLM rangers confiscated 79 weapons, 10 vehicles, and \$300,000 in cash in the line of duty. Over 23,450 marijuana plants were seized, along with 1,729 pounds of cocaine, 38 pounds of amphetamine, and 100 units of LSD in 1992. A total of 168 drug enforcement arrests were made.

Support Services

BLM People

Cadastral Survey

Engineering

Hazardous Materials Management

Planning and Environmental Coordination



Kobuk District Ranger Mike Billbe checks on a cabin while on patrol in Alaska's Talkeetna Mountains.



Patti Tengberg is a fully functional employee despite her blindness. She uses an IBM PC and a braille keyboard. An optic character recognition scanner scans printed pages and reads the text aloud. Tengberg teaches classes for the Employee Development Section.

BLM People

At the BLM, people are the most important resource.

Personnel Management

The BLM employed about 9,500 permanent employees and 3,000 seasonal and temporary workers in 1992. BLM employees represent diverse skills and technical backgrounds ranging from petroleum engineers to range conservationists, archaeologists to computer specialists.

The Personnel Management Program is directed by the Washington Office and administered through 15 Servicing Personnel Offices located in each of the



Public Services Contact Representative Matthew Lee helps 4-year old Laura McWhorter select a book at the Alaska State Office.

BLM's 12 State Offices; the Service Center in Denver, Colorado; the National Interagency Fire Center in Boise, Idaho; and the Washington Headquarters Office.

Responsibilities of the Personnel Management Office include recruitment, internal promotion and placement of employees, position classification and pay administration, employee relations, labor-management relations, employee benefits, security management, employee recognition and performance management.

A BLM Demographics Baseline Data Study was completed in 1992 to assist long term planning in human resources management. Results of this study will provide forecasts for retirements and other separations, and will assist in recruitment planning.

A formal recruitment plan will increase opportunities for recruitment with colleges and organizations such as Historically Black Colleges and Universities (HBCU's), Hispanic Association of Colleges and Universities (HACU's), and others in order to increase cultural diversity within the bureau.

Training and Employee Development

The BLM's training and employee development program seeks to provide support to all levels of employees in the BLM. In 1992, the agency devoted 100 Full Time Equivalent (FTE) positions and \$7 million to training efforts. This work is decentralized, with program responsibilities shared by the National and State Offices. Much of the hands on training is provided by the Phoenix Training Center in Arizona and the National Interagency Fire Center in Idaho.

The BLM revised and reprinted its resource guide, *Careers Program*, which provides information on the many training and employee development programs available, from new employee orientations to supervisory management training, and from CHOICES Career Development workshops to the Senior Executive Candidate Development Program.

The BLM offers training to employees in the early stages of their careers to identify and develop both a reserve of technical expertise and a body of high potential future managers and leaders.

The BLM's training centers and State training offices conduct a variety of technical training programs designed to help the BLM more effectively carry out its mission.

Equal Employment Opportunity

Affirmative employment and targeted outreach were the two key elements that characterized the BLM's Equal Employment Opportunity program in 1992. During the year, the BLM participated in initiatives for HBCU, the Resource Apprenticeship Program for Students (RAPS), Cooperative Education, and the HACU. Through these initiatives, the BLM has directed funds to natural resource and environmental education efforts, enhanced natural resources management curricula, and provided opportunities for minority and disadvantaged students to gain first hand experience in management of natural and cultural resources on the public lands.

The HBCU Initiative is a college relations program through which BLM employees serve as adjunct professors and instructors at a number of participating colleges, including Bowie State University in Bowie,

Maryland; Howard University in Washington, D.C.; and Jackson State University in Jackson, Mississippi. BLM professionals also teach two courses developed by the BLM for the Natural Resources curriculum at Wayne County Community College in Detroit, Michigan.

The RAPS initiative introduces minority students and disadvantaged youths to the professional aspects of natural resources management as a career. At the end of 1992, 75 students were participating in the program.

The Cooperative Education Program provides for the integration of a student's academic studies and Federal work experiences. At the close of FY 1992, 250 students were enrolled as cooperative education students throughout the BLM.

The BLM participated in two regional conferences planned by the Department of the Interior as joint ventures with HACU member institutions in 1992. The BLM also developed an aggressive plan of action for implementing and achieving goals of the DOI-HACU Partners Program aimed at increasing employment opportunities for students of HACU member institutions.

The BLM's permanent employee workforce experienced a net gain of 92 minority employees (47 women) and 218 non-minority women in 1992.

Volunteers

Volunteer services increased during FY 1992, with a 13 percent growth over FY 1991.

Volunteers serve the BLM in diverse ways. They improve habitat for fish and wildlife; serve as trail and river guides; build or maintain trails and campgrounds; improve

range and forestland by planting trees and other vegetation; conserve soil and water resources by improving watersheds; perform mapping, research and other tasks to support mineral and energy planning and development; and assist with administrative support by operating computers and other office equipment.

FY 1992 volunteer statistics include the following:

- 21,912 volunteers contributed one million hours of work, 13 percent more than in FY 1991.
- Contributed services were valued by the BLM's field managers at more than \$13.4 million, 18 percent more than in FY 1991.
- Associated costs to the Government were estimated at \$1.3 million indicating a benefit-to-cost relationship of 10 to 1.
- Each volunteer worked an average of 48 hours.

Hosted Workers: The BLM also recruits "hosted workers" or people who work for the BLM and are paid by another entity. One example of such a program is the Senior Community Service Employment Program, a Federal-State program through which low-income elderly persons can work for public or community service organizations and be trained on the job while paid minimum wage.

In FY 1992, the BLM's field managers were assisted by 1,595 hosted workers, who served 294,740 hours and accomplished work valued at \$3 million. Incidental costs to the BLM were estimated at \$170,000.

Cadastral Survey



Surveying the Public Lands

The BLM's professional land surveyors execute cadastral surveys of the Nation's 270 million acres of public lands. While much of the work involves resurveys (where original monumentation has weathered away or has been destroyed), significant original survey work is accomplished, mostly in Alaska and on Indian Trust lands.

Cadastral Survey establishes legal boundaries for federal lands and produces the survey plats and field notes that form the base land ownership theme of the BLM's Automated Land and Mineral Records System (ALMRS)/Modernization Project.

Land surveyors are training natural resource managers to use

Global Positioning System (GPS) instruments to define boundaries of a variety of resource sites such as cultural, recreational, wilderness, or timber. Often these activities involve correlating survey data with other data in a spatial format, such as the production of special purpose maps.

In 1992, the BLM sponsored the American Indian Science and Engineering Society (AISES) Annual Conference. Recruiting efforts at colleges and universities with surveying curricula and outreach initiatives with AISES, Historic Black Colleges and Universities, and the Hispanic Association of Colleges and Universities also were emphasized in 1992, and will continue to be a priority.

Reimbursable Cadastral Surveys

The Cadastral Survey division supplies reimbursable survey services for a number of Federal agencies. These services are coordinated through each State Office's convening Interagency Cadastral Coordination Council (ICCC), where survey requests are reviewed and prioritized on an inter-agency basis.

Field and Office Accomplishments

A total of 6,501 miles of line were surveyed or resurveyed in the field in 1992, including 556 miles in Alaska. Also in 1992, a total of 10,158 miles of line was officially recorded on survey plats, including 4,011 in Alaska.

Engineering

The BLM program oversees design, construction and maintenance of buildings, roads, recreation sites, and other facilities that support the BLM's programs.

In FY 1992, the BLM completed designs for 117 buildings, 80 recreation sites, 88 miles of road, 67 miles of trail, and 7 bridges. The BLM also is constructing 86 buildings, 47 recreation sites, 44 miles of roads, 21 miles of trail, and 3 bridges. Maintenance was completed or is under way on 1,144 buildings, 912 recreation sites, 13,064 miles of roads, 570 miles of trail, and 234 bridges.

Increased maintenance funding and the availability of a newly implemented Facilities Inventory and Maintenance Management System have enabled the BLM to

improve its level of scheduled maintenance in addition to meeting the need for some badly needed corrective maintenance and replacements.

Hazardous Materials Management

Protection of public health and the environment are among the goals of the Hazardous Materials Management program, which in 1992 began a more preventive approach to pollution management. In addition to managing cleanups on the public lands, the BLM is taking a hard look at how the Bureau and land users operate, and is designing outreach and education programs to guide waste prevention and reduction on the public lands.



BLM engineers oversee design, construction, and maintenance of buildings, roads, and other facilities. Here a concrete trail is built to provide access to ANASAZI ruins.



The BLM's hazardous materials management program protects public health and the environment.

The four major goals of the BLM's program are (1) pollution prevention, (2) waste minimization, (3) waste management, and (4) cleanup and restoration. These goals are accomplished by a professional staff, including a program leader in each State Office, and a coordinator in every District Office and in a number of Resource Area Offices. In addition, the BLM's Service Center in Denver provides a cadre of technical experts to consult on special issues throughout the BLM. A headquarters staff in Washington, D.C., provides policy guidance, and training is provided through the BLM's Phoenix Training Center.

Training sessions throughout the BLM promote in-house pollution prevention and waste minimization in order to reduce solid and hazardous waste generated at BLM facilities, and provide technical support. A similar outreach pro-

gram focuses on public land users and land use authorizations.

At the end of 1992, the BLM completed 40 percent and initiated another 33 percent of actions recommended in an April 1992 evaluation of the program by the National Academy of Engineers. For example, the BLM is implementing a recommendation to integrate the Hazardous Materials Management program into other BLM programs through a newly-established waste minimization oversight group and a new strategic plan.

The program is expanding partnerships and coordination to identify and conduct risk assessment at potential hazard sites on public lands, and to accomplish cleanups of sites. Also in 1992, the BLM began carefully selecting and limiting the number of disposal facilities to which it sends hazardous wastes in an effort to control contingent liability.

Under the Recreation and Public Purposes Act, the BLM leases land to municipalities for "public purposes," including (in the past) municipal solid waste landfills. Some of these have had releases of hazardous substances, and the BLM must investigate these and take appropriate action. A total of 45 compliance audits were conducted at landfills on public lands in 1992. The BLM expanded preliminary assessments and site inspections and continued remedial investigation and feasibility study contracts at the Lee Acres site in New Mexico—on the Environmental Protection Agency's "National Priorities List" (NPL)—and potential NPL sites in Washington and Idaho.

The BLM expanded the Hazardous Materials Management program in all BLM State Offices in 1992. Field offices were involved in more than 120 emergency hazardous substance cleanups on public lands in 1992, one of which cost more than \$1.5 million. In a number of cases, the responsible party conducted the removals at the BLM's direction. In other cases, the BLM and the responsible parties jointly conducted the work.

Planning

FLPMA includes a section written specifically to ensure that the Federal Government will make plans to protect public lands against misuse and ensure their long-term productivity. Resource Management Plans (RMP's) are a blueprint for how public lands will be treated. The most important information in RMP's is the de-

scription of what will be done to implement, maintain and monitor land use strategies. Every BLM State is involved in writing RMPs.

Two special aspects of the BLM's planning process are the method of combining RMP's with environmental impact statements and their emphasis on public participation and cooperation with other governments. Environmental impact statements as required by the National Environmental Policy Act, provide a framework for analysis of the best scientific, social, and economic data. Public participation is essential for the BLM to reflect the values of the American people in planning and in making land-use decisions.

Areas of Critical Environmental Concern

Areas of Critical Environmental Concern (ACEC) are designated to protect and prevent irreparable damage to important historic, cultural, or scenic values; fish and wildlife resources or other natural systems or processes; or to identify natural hazards. Natural areas also may be designated to maintain natural diversity and provide for scientific research.

ACEC's are identified and designated through the BLM's planning system. Appropriate management actions for each area are developed and tailored to reflect site-specific resources and local circumstances. Protection of the identified values is ensured whenever subsequent uses are undertaken or authorized.

During FY 1992, 41 new ACEC's were designated. This raised the total number of ACEC's to 525, encompassing 8.7 million acres.

Management and Finance

**Management and
Productivity Initiatives
Administrative Services**

**Information Resources
Financial Management
Appropriations and
Expenditures**

Management, Quality and Productivity Initiatives

The BLM participated in the Department of the Interior's Productivity Enhancement Fund (PEF) program which encourages managers to experiment with low cost, innovative ideas to increase efficiency. The BLM funded several projects in 1992, including elimination of a drainage case backlog in California; foam proportioner evaluation at the Boise, Idaho, National Interagency Fire Center; a tracking system for the National Gas Policy Act in New Mexico; and in Oregon, electronic control of livestock in riparian areas and an information processing system.

A total of 31 BLM projects have been funded through this program. Since the Department has been able to provide matching funds only once since the program's inception, the Department will not sponsor the program beyond 1992.

Rightsizing the BLM

The BLM received Departmental approval to implement organizational changes in the Washington Office to complement rightsizing activities begun in 1991. Significant changes include the following:

- A new position located in Boise, Idaho—Assistant Director for Resource Protection—was established to oversee the BLM's law enforcement and fire management programs as well as operation of the National Interagency Fire Center (formerly the Boise Interagency Fire Center).
- An International Affairs Staff and a Correspondence Staff were established under the Deputy Director for External Affairs.
- All human resources programs were placed under one Assistant Director (Support Services).
- Six divisions in Energy and Minerals were consolidated into three divisions.
- The National Wild Horse and Burro program was assigned to the Nevada State Office.
- The National Cadastral Survey Program was assigned to the Eastern States Office.

- Advisors for science, strategic planning, law enforcement, and fire and aviation were approved.

BLM 2015

Under a second phase of rightsizing—called BLM 2015—BLM management will take a hard look at inefficient processes and management systems. To that end, work groups were established to review nine processes that consume substantial resources. Review of additional processes is anticipated in FY 1993. The results of these reviews will guide the appropriate organizational structure for the BLM and will assist the agency meet challenges it will face through the next 25 years—until the year 2015.

Administrative Services

Procurement

The BLM spent \$136.6 million for goods and services in 1992. This includes approximately \$74.5 million for 2,976 contract actions and \$62 million for 91,078 small purchases of \$25,000 or less.

Credit Cards

The BLM continues to maximize the use of U.S. Government Credit Cards for small purchases. BLM employees made purchases of over \$5 million using over 1,200 cards. This reduces paperwork by eliminating the preparation and distribution of purchase orders, permits over the counter transactions, and guarantees fast payment.

IDEAS

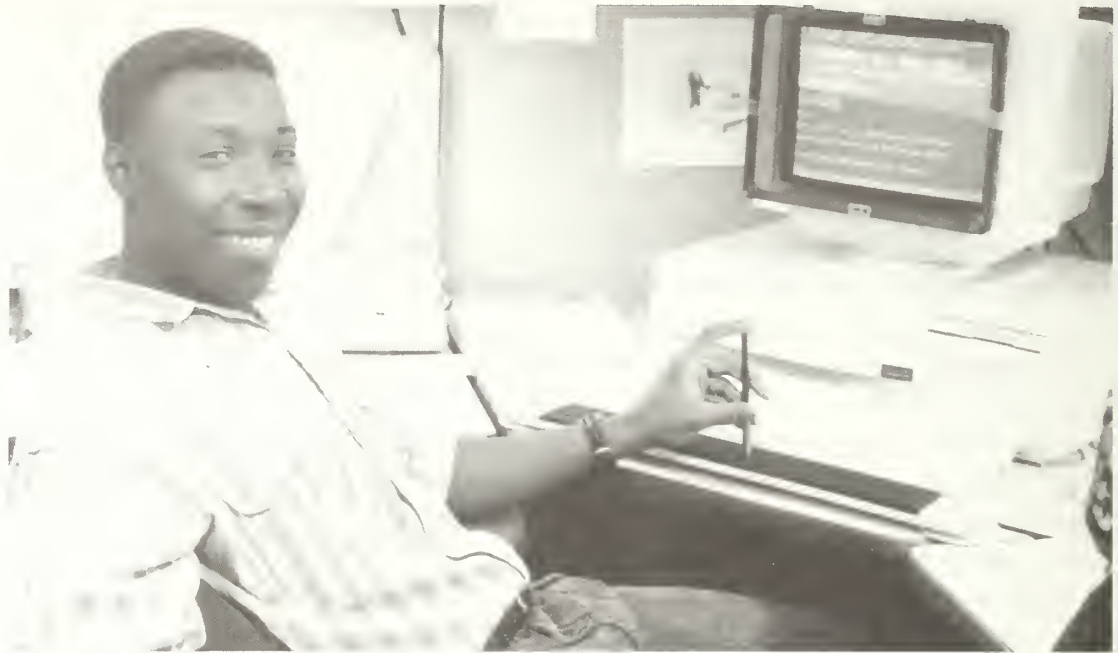
The BLM is participating in the Department of the Interior's Electronic Acquisition System (IDEAS), which will automate all procurement operations throughout the Department of the Interior, from requisition to close-out. IDEAS also will interface with other automated Departmental and Bureau administrative systems, including the Federal Financial System and the Interior Procurement Data System. IDEAS will be used by all Interior Bureaus and offices. Implementation is expected to be completed by FY 1995.

Contract Support

The BLM procurement program supports major BLM program contracts and cooperative agreements ranging from the Hazardous Materials Management program studies to Global Change Research and Indian Self-Determination Act contracts for cadastral surveys in Alaska.

The BLM has developed a standardized statement of work (SOW) for its Hazardous Materials Management program's emergency response requirements. The standard SOW has been used in competitive solicitations for BLM California and New Mexico response requirements.

The BLM has issued a fully competitive Request For Proposals for its Bureauwide Automated Land and Mineral Records System (ALMRS)/Modernization Project. Negotiations are being conducted, toward a target award date of April 1993. The contract will provide Automated Data Processing (ADP) hardware; commercial off-the-shelf



Second year Co-op Student Darnell Collins of Jackson State University (Mississippi) puts his computer skills to work in BLM-Alaska's Division of Information Resource Management.

(COTS) software, including associated operating system software; and Database Management System (DBMS) and Geographic Information System (GIS) capabilities.

Under a delegation of authority from the General Services Administration, the BLM has awarded and administers more than 100 active facility leases nationwide. A review by GSA gave the BLM high marks in 1992. There were no substantive suggestions for improvement.

Property Management

The BLM continues to operate the Fleet Management System for the Department of the Interior, providing fleet utilization reports based on input from all Interior agencies.

The BLM's automated property disposal module, which enables electronic screening and reporting

of excess personal property, has been adopted by the Department on a pilot basis. The BLM has brought units of several Interior Bureaus onto the system. Within that system, the BLM developed a process for direct on-line submission to GSA of excess property listings—the first Federal agency to accomplish that. On-line transmission will speed up the entire property disposal process.

Uniforms

The number of employees in uniform increased 17.1 percent, from 5,025 in 1991 to 5,886 in 1992. A total of 4,355 men and 1,531 women are now in uniform.

The BLM has dress, field, and work uniforms. In April, the Bureau Management Team approved four new uniform components for Law Enforcement employees to

help provide a clear distinction between law enforcement and non-law enforcement personnel. This will assist the public seeking law enforcement assistance and will provide for the safety of the other employees who might otherwise mistakenly be identified as law enforcement officers.

Records Management

The BLM continues to be largest producer, consumer, and disseminator of information on multiple-use management of public lands. In FY 1992, efforts continued toward improving the management of this information.

A records management study was conducted to identify needed improvements in leadership, management, guidance, and implementation. A Project Charter was also proposed for developing a system for inventorying and analyzing the BLM's records holdings. The inventory will be used to analyze the economic and efficient management and use of BLM information and will form the basis for recommending changes as needed.

Information Resources:

Modernization Projects Will Lead the BLM Into the 21st Century

The BLM maintains over a billion records on natural resources, land ownership, and land uses and receives about six million requests for information each year.

As information has become easier to access and distribute through advanced technology, demand for immediate access to information has grown. The BLM is using a number of modern automation projects designed to provide timely access to land data for a growing audience—many of whom depend on the information to make decisions on competing uses of the public lands. These information users include BLM managers, other government agencies, Congress, private organizations, and the public.

The BLM's automation projects are guided by a process referred to as Automation, Information Resources Management, Modernization projects or AIM. Implementing AIM will result in effective projects that:

- Speed responses to public inquiries about the lands managed by the BLM such as questions on lands, minerals, and renewable resources.
 - Increase access to all BLM records.
 - Assist in decision making by providing more accurate and timely information on a wide range of alternatives on which to base environmentally sound land-use decisions.
- AIM is not limited to developing computer hardware and software, but also addresses developing and improving manual information management processes. AIM directly involves users, who are called upon to initiate, develop, and test projects. No system is accepted until a team of users has confirmed that it meets their criteria. To date, 11 AIM projects have been approved for development Bureauwide, and dozens more have been implemented State and District-wide.

Automated Land and Mineral Records System

The focus of the BLM's initial automation efforts at this time is the Automated Land and Mineral Records System (ALMRS), which combines land status and authorizations, including property rights and permits, with other data on legal land parcels.

- Preserve disintegrating public land records. The BLM houses all public land records for the Federal government—some dating back to the American Revolution.
- Make storing, retrieving and updating land records faster and more efficient.
- Speed processing of applications for leases and permits to use public lands.

A major milestone in this project was concluded in 1992 with a demonstration of the ALMRS Prototype in New Mexico and in Washington, D.C. This gave the Office and Management and Budget, Congressional staff, BLM employees, and others a close look at the basic functions the BLM is looking for in the initial ALMRS/Modernization contract, expected to be awarded in FY 1993.

Standardization of Data

In anticipation of future automated systems, the BLM's field offices are creating data standards for their resource programs. This will be reflected in new data administration policies. To this end, a new Data Administration Manual and training course were completed in FY 1992.

The goal is to eventually integrate resource data typically stored on mylar overlays, aerial photos, and paper maps with ALMRS data to create one central point for accessing all data on any given parcel of land managed by the BLM.

Information Security and Access

With the passage of the Federal Computer Security Act of 1987, the BLM began a comprehensive Information Security Program. This includes identifying and protecting the BLM's data from unauthorized access and developing a security plan for sensitive systems.

Just as important as security, however, is providing the widest access to BLM data allowable by law. In 1992, the BLM developed internal procedures and training on records management and public access to records. This included guidance on Security and FOIA requests, and

new manuals outlining procedures for records administration, vital records, and electronic records.

Sharing Data is Key

The BLM strives to increase capabilities in data sharing in order to avoid duplication and increase efficiency throughout the Federal Government. Of particular note is the BLM's role on the Interior Geographic Data Committee (IGDC) and the Federal Geographic Data Committee (FGDC), both major efforts to establish standards for commonly used base data. In 1992, the BLM served as FGDC's lead for the Cadastral Survey Subcommittee.

The BLM entered into an agreement in 1992 with the National Association of County Governments to assist in establishing GIS capabilities for their members. The Bureau will continue to form new information partnerships with the public and private sector, and also to automate data for a more effective exchange of information.

Only through automation and data sharing will the BLM be able to continue to carry out its mission into the 21st Century, given the steady increase of requests for information and the competing demands for the use of the public lands. It is for that reason that automation will be one of the primary goals for the Bureau over the next 10 years.

Financial Management

The BLM's Division of Financial Management in the Washington Office, and its operating counterpart at the Denver Service Center,

provide accounting and financial management services. Policy guidance and staff assistance are provided to BLM program management so that decisions can be made within the context of governing regulations and with an awareness of any financial impact. The Division also provides accounting services for one annual and numerous permanent appropriations that provide funds to States and local governments in which Federal land resources are located, either as payments in lieu of taxes, or as shared revenues from the sale, leasing, and disposition of resource commodities. In addition, the BLM is a primary collector of Federal revenues for use of resources on public lands.

Chief Financial Officers Act

In FY 1991, the BLM began implementation of the Chief Financial Officers Act of 1990, designed to improve financial management information and performance by placing responsibility for all financial activities on a Chief Financial Officer within each Federal agency. Areas of emphasis include program and administrative financial management systems to improve the quality of program information, and preparation of annual audited financial reports for the Office of Management and Budget and Congress. These reports will include measures of program performance. Other areas of emphasis are activities to improve the recruitment, retention and skills of financial management personnel and more frequent reviews of services provided for which the costs could be recovered. During FY 1992, efforts were concentrated

on preparing plans for implementation, and working on a report on the FY 1991 performance and financial results of the BLM.

Federal Financial System

The BLM implemented the Federal Financial System (FFS) in October 1990. The system is part of a Government-wide effort to improve and standardize financial systems, operations and information throughout Federal agencies. FFS operated successfully throughout FY 1992 with continuing improvements. Efforts concentrated on improving reporting capabilities and access to the system for non-standard reports.

Financial Report and Statements

The BLM prepared a financial report and statements for FY 1991 as required by the Chief Financial Officers Act. The report is currently being audited by the Office of Inspector General.

Credit Card Systems

Expansion of the credit card collection system begun in FY 1990 continued throughout 1992. This program allows the public to pay amounts owed the BLM through use of VISA or Mastercard.

Revenues and Receipts

The BLM is a primary collector of Federal revenues. Gross receipts from the lease, use, and sale of public land and resources totaled approximately \$257 million in FY 1992. (Energy and minerals operations on BLM-managed lands generated over \$1 billion in FY 1992, but a majority of these receipts is actually administered by

the Minerals Management Service.) Of this amount, about \$96 million will be returned to the States; \$17 million was transferred to the Reclamation Fund; \$10 million was transferred to the Range Improvement Fund; and the remaining \$134 million was transferred into the general fund of the United States Treasury.

State and Local Shares

The BLM's most direct fiscal impact upon States that include public land is through revenue sharing and other direct payments. In the period from 1976 through 1992, State and local governments received nearly \$4.8 billion from the Department of the Interior as their share of revenues collected from the lease or sale of public land resources, and as in-lieu payments for tax-exempt lands.

Revenue Sharing

Taylor Grazing Act revenues are distributed according to the type of land generating them. Of the fees collected from livestock grazing districts, 12.5 percent are distributed to the State for expenditures to benefit the counties generating these grazing receipts. Grazing revenues generated on public land outside the grazing districts are shared equally with the State. States have the authority to expend the funds to benefit the counties where grazing monies are collected.

Land sale revenues generated in Nevada under the Burton-Santini Act are collected and distributed on an annual basis. This Act authorizes the allocation of ten percent of gross revenues back to Clark County or the municipality

in which these revenues are generated, and five percent to the State of Nevada. The remaining revenues are deposited in the Land and Water Conservation Fund for the purchase of environmentally sensitive land in the Lake Tahoe Basin.

Payments in Lieu of Taxes

Units of general local government within Western States are the principal beneficiaries of the 1976 Payments in Lieu of Taxes Act. This law was enacted to provide Federal payments to those areas where lands are in Federal ownership and, therefore, are exempt from local property taxes. Serving as a supplement to revenue sharing funds, payments in lieu of taxes are made directly to units of general local government and may be used for any governmental purpose.

Lands eligible for payments in lieu of taxes are Federally owned lands in the National Forest, National Park, and National Wildlife Refuge Systems; lands administered by the BLM; land dedicated to the use of Federal water resource development; dredge disposal areas under the jurisdiction of the Army Corps of Engineers; inactive and semiactive Army installations; and certain lands donated to the United States Government. The Act specifically prohibits payments for land (but not certain donated land) that was tax exempt before being acquired from State or local government.

Since payments in lieu of taxes started in 1977, more than \$1 billion has been paid to local governments; about \$100 million of that amount was paid in FY 1992.

APPROPRIATIONS AND EXPENDITURES

BLM programs are funded through six major operating appropriations, several minor permanent and trust appropriations, and reimbursements from other Federal agencies for work performed on their behalf. In addition, the BLM budget includes one annual appropriation and numerous permanent appropriations that provide funds to State and local governments in which Federal land resources are located, either as payments-in-lieu of taxes or as shared revenues from the sale, leasing and disposition of resource commodities.

BLM FUNDING—1989 - 1993

	FY 1989 actual	FY 1990 actual	FY 1991 actual	FY 1992 actual	1993 estimate
(In millions of dollars)					
BLM Operating Appropriations (1)	\$632.1	725.9	722.5	737.0	742.4
Payments-in-Lieu of Taxes	105.0	105.0	104.4	103.7	104.1
Permanent Payments to States	127.0	120.8	118.5	99.9	89.6
Other Miscellaneous	7.5	169.6 (2)	19.6	17.0	17.2
TOTALS: (in millions)	871.6	1,121.4	965.0	957.6	953.3

(1) The FY 1991, FY 1992, and FY 1993 Operating Appropriations amounts include only BLM's firefighting program.

(2) The FY 1990 Other Miscellaneous category includes \$150.8 million appropriated as permanent budget authority for the Cook Inlet Region, Inc. (CIRI), Property Account, established to settle CIRI's land entitlement issues in Alaska. The BLM is responsible for monitoring and administering this account.

FUNDING, OBLIGATIONS AND WORK-YEARS BY PROGRAM - FY 1991-1993**Management of Lands and Resources (MLR)**

PROGRAM	FY 1991 Actual	FY 1992 Actual	FY 1993 Enacted
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**Energy and Minerals (includes Oil & Gas,
Coal, Mining Law Administration, etc.)**

Appropriation (\$000's)	74,452	80,354	69,736
Obligations (\$000's)	75,163	79,570	N.A.
Work Years	1,400	1,459	N.A.

Lands and Realty Management

Appropriation (\$000's)	39,187	40,516	40,230
Obligations (\$000's)	39,185	39,878	N.A.
Work Years	764	763	N.A.

**Renewable Resource Management
Forest Management (except Western Oregon)**

Appropriation (\$000's)	6,753	7,080	6,737
Obligations (\$000's)	6,720	6,905	N.A.
Work Years	118	118	N.A.

Wild Horse and Burro Management

Appropriation (\$000's)	14,341	14,604	16,020
Obligations (\$000's)	14,278	14,575	N.A.
Work Years	147	151	N.A.

Rangeland Management

Appropriation (\$000's)	40,113	40,853	42,530
Obligations (\$000's)	40,086	40,510	N.A.
Work Years	760	776	N.A.

Soil, Water and Air Management

Appropriation (\$000's)	17,809	18,235	19,592
Obligations (\$000's)	17,794	17,949	N.A.
Work Years	237	244	N.A.

Wildlife Habitat & Fisheries Management

Appropriation (\$000's)	31,113	34,137	36,565
Obligations (\$000's)	31,103	33,799	N.A.
Work Years	446	530	N.A.

FUNDING, OBLIGATIONS AND WORK YEARS BY PROGRAM FY 1991 - 1993**Management of Lands and Resources** (continued)

PROGRAM		FY 1991 Actual	FY 1992 Actual	FY 1993 Enacted
Recreation Management (includes Recreation, Cultural, & Wilderness Resource Management)				
Appropriation	(\$000's)	39,447	45,075	46,722
Obligations	(\$000's)	40,568	44,885	N.A.
Work Years		626	766	N.A.
Recreation Operating Fees				
Appropriation	(\$000's)	-----	1,382	1,438
Obligations	(\$000's)	N.A.	1,565*	N.A.
Work Years		26	30	N.A.
* includes funds carried over from previous years.				
Resource Management Planning				
Appropriation	(\$000's)	9,451	9,705	9,870
Obligations	(\$000's)	9,450	9,694	N.A.
Work Years		162	160	N.A.
Information & Resource Data Management (includes Information Systems Operation & Maintenance, ALMRS, & Resource Data Acquisition)				
Appropriation	(\$000's)	43,015	46,048	55,741
Obligations	(\$000's)	47,536	43,403	N.A.
Work Years		623	584	N.A.
Resource Protection & Maintenance (includes Alaska Cadastral Surveys, Other State's Cadastral Surveys, Resource Protection and Law Enforcement, Facilities Maintenance, & Hazardous Materials Mgmt.)				
Appropriation	(\$000's)	84,378	91,576	95,514
Obligations	(\$000's)	83,526	90,436	N.A.
Work Years		876	1,050	N.A.
General Administration				
Appropriation	(\$000's)	97,426	102,584	102,051
Obligations	(\$000's)	97,310	102,440	N.A.
Work Years		1,020	1,064	N.A.
Emergency Operations (includes Grasshopper and Mormon Cricket Control, & Emergency Damage Repair)				
Appropriation	(\$000's)	N.A.	N.A.	N.A.
Obligations	(\$000's)	304	223	N.A.
Work Years		4	4	N.A.
Use of Prior Year Funds				(2,500)

MANAGEMENT OF LANDS AND RESOURCES - TOTALS

Appropriation	(\$000's)	497,485	532,149	540,246
Obligations	(\$000's)	503,023	524,267	0
Work Years		7,209	7,699	0

FUNDING, OBLIGATIONS AND WORK YEARS BY PROGRAM FY 1991 - 1993
Department of the Interior Fire Protection

PROGRAM		FY 1991	FY 1992	FY 1993
		<i>Actual</i>	<i>Actual</i>	<i>Enacted</i>

Fire Protection - BLM (Only)
Fire Management and Presuppression

Appropriation	(\$000's)	52,965	72,539	64,674
Obligations	(\$000's)	54,302	74,047*	N.A.
Work Years		912	1,084	N.A.

Fire Protection Department Wide (including BLM, NPS, FWS, and BIA)

Appropriation	(\$000's)	101,035	115,492	118,296
Obligations	(\$000's)	100,136	126,957*	N.A.
Work Years		1,772	1,965	N.A.

* includes funds carried over from previous years.

EMERGENCY DEPARTMENT OF THE INTERIOR FIRE FIGHTING FUND

PROGRAM		FY 1991	FY 1992	FY 1993
		<i>Actual</i>	<i>Actual</i>	<i>Enacted</i>

Emergency Operations - BLM (Only)

Appropriation	(\$000's)	47,315	55,947	72,449
Obligations	(\$000's)	48,668	55,754	N.A.
Work Years		190	159	N.A.

Emergency Operations Departmentwide (BLM, NPS, FWS, BIA)

Appropriation	(\$000's)	66,843	99,598	112,674
Obligations	(\$000's)	79,001	91,108	N.A.
Work Years		339	335	N.A.

Emergency Transfers

Transfers (\$000's)		5,000	(5,000)	N.A.
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Construction and Access

Appropriation	(\$000's)	15,305	14,138	15,676
Obligations	(\$000's)	11,372	8,708	N.A.
Work Years		39	42	N.A.

Payments in Lieu of Taxes

Appropriation	(\$000's)	104,448	103,677	104,108
Obligations	(\$000's)	100,540	99,973	N.A.
Work Years		2	2	N.A.

FUNDING, OBLIGATIONS AND WORK YEARS BY PROGRAM FY 1991 - 1993
Oregon and California Grant Lands (O&C)

PROGRAM		FY 1991	FY 1992	FY1993
		Actual	Actual	Enacted

Western Oregon Resources Mgmt.
(includes Forest Mgmt. & Reforestation/
Development & Other Resource Mgmt.)

Appropriation	(\$000's)	74,391	79,449	71,600
Obligations	(\$000's)	81,767	78,651	N.A.
Work Years		1,230	1,175	N.A.

Western Oregon Information
and Resource Data Systems

Appropriation	(\$000's)	2,470	2,466	2,460
Obligations	(\$000's)	2,362	2,502	N.A.
Work Years		11	13	N.A.

Western Oregon
Facilities Maintenance

Appropriation	(\$000's)	6,265	6,320	7,456
Obligations	(\$000's)	6,302	6,385	N.A.
Work Years		80	107	N.A.

Western Oregon Construction
& Acquisition

Appropriation	(\$000's)	906	902	899
Obligations	(\$000's)	889	916	N.A.
Work Years		9	10	N.A.

Western Oregon Renewable Resource Mgmt. (Excess Receipts)

Obligations	(\$000's)	N.A.	4	N.A.
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OREGON AND CALIFORNIA GRANT LANDS - TOTALS

Appropriation	(\$000's)	84,032	89,137	82,415
Obligations	(\$000's)	91,320	88,458	N.A.
Work Years		1,330	1,305	N.A.

PROGRAM		FY 1991 Actual	FY 1992 Actual	FY1993 Enacted
Land Acquisition				
Appropriation	(\$000's)	15,072	25,003	27,796
Obligations	(\$000's)	11,696	15,987	N.A.
Work Years		38	62	N.A.
Forest Ecosystems Health and Recovery				
Appropriation	(\$000's)	N.A.	N.A.	991
Obligations	(\$000's)	N.A.	N.A.	N.A.
Work Years		N.A.	N.A.	N.A.
Range Improvements				
Appropriation	(\$000's)	10,306	10,687	10,747
Obligations	(\$000's)	10,524	9,568	N.A.
Work Years		100	105	N.A.
Service Charges, Deposits, and Forfeitures				
Appropriation	(\$000's)	8,263	7,899	7,932
Obligations	(\$000's)	9,737	9,066	N.A.
Work Years		110	104	N.A.
Miscellaneous Trust Funds Current				
Appropriation	(\$000's)	6,488	7,285	7,380
Obligations	(\$000's)	7,391	10,174	N.A.
Work Years		91	104	N.A.

TOTAL CURRENT

Appropriation	(\$000's)	909,277	1,005,065	1,028,261
Obligations	(\$000's)	924,740	984,266	0
Work Years		11,030	11,723	0
Transfers		5,000	(5,000)	N.A.

SUMMARY OF PAYMENTS IN LIEU OF TAXES BY STATE

State	Payment FY 1992
Alabama	\$133,419
Alaska	4,507,941
Arizona	8,400,142
Arkansas	934,515
California	10,194,587
Colorado	6,426,496
Connecticut	16,049
Delaware	9,576
Dist. of Columbia	5,283
Florida	1,039,091
Georgia	790,686
Guam	895
Hawaii	36,263
Idaho	7,245,410
Illinois	305,050
Indiana	211,909
Iowa	127,815
Kansas	337,818
Kentucky	594,384
Louisiana	159,163
Maine	94,239
Maryland	43,040
Massachusetts	53,609
Michigan	1,139,050
Minnesota	685,811
Mississippi	345,558
Missouri	861,076
Montana	7,701,030
Nebraska	333,815
Nevada	6,730,261
New Hampshire	89,862
New Jersey	42,619
New Mexico	10,492,453
New York	40,805
North Carolina	1,268,014
North Dakota	556,279
Ohio	207,377
Oklahoma	781,425
Oregon	2,871,042
Pennsylvania	211,483
Puerto Rico	22,292
South Carolina	169,246
South Dakota	1,300,049
Tennessee	464,399
Texas	1,313,903
Utah	8,860,477
Vermont	236,604
Virgin Islands	10,928
Virginia	1,184,836
Washington	1,409,119
West Virginia	777,068
Wisconsin	471,984
Wyoming	7,194,674

Total**\$99,440,919**

Payment of Bureau of Land Management Receipts to States, Fiscal Year 1992 (Actual)

States	Mineral Leases and Permits	Grazing Receipts		Grazing Receipts Inside Grazing Districts	Sale of Public Land and Minerals		Total
		Outside Grazing Districts	Outside Grazing Districts		Land and Minerals	Other	
Alaska	126,000 ¹	0	0	0	3,000	0	129,000
Arizona	7,000	129,000	83,000	83,000	8,000	0	227,000
California	21,000	115,000	23,000	23,000	62,000	0	221,000
Colorado	51,000	41,000	103,000	103,000	11,000	0	206,000
Idaho	14,000	31,000	237,000	237,000	40,000	0	322,000
Montana	8,000	138,000	169,000	169,000	22,000	389,000	726,000
Nebraska	0	1,000	0	0	0	0	1,000
Nevada	5,000	21,000	363,000	363,000	2,241,000	0	2,630,000
New Mexico	143,000	217,000	337,000	337,000	31,000	21,000	749,000
North Dakota	0	10,000	0	0	0	1,000	11,000
Oklahoma	18,000 ²	0	0	0	1,000	0	19,000
Oregon	3,000	41,000	164,000	164,000	732,000	119,073,000 ³	120,013,000
South Dakota	0	79,000	0	0	0	0	79,000
Utah	38,000	0	197,000	197,000	12,000	0	247,000
Washington	0	24,000	0	0	3,000	0	27,000
Wyoming	146,000	437,000	248,000	248,000	17,000	0	848,000
Totals	\$580,000	\$1,284,000	\$1,924,000	\$1,924,000	\$3,183,000	\$119,484,000	\$126,455,000

¹ The BLM continues to make payments on receipts from the National Petroleum Reserve, Alaska and other minor categories of mineral receipts even though Minerals Management Service has primary responsibility for mineral receipts collection.

² Includes \$18,000 for Oklahoma Royalties

³ Includes \$118,498,000 from O&C Grant Lands, \$575,000 from Coos Bay Wagon Roads Grant Lands, and \$411,000 from National Grass Lands.

BLM Offices Around the Country

Bureau of Land Management
Department of the Interior
1849 C Street, NW
Washington, D.C. 20240
(202) 208-5717

Denver Service Center
Denver Federal Center—Bldg. 50
Denver, CO 80225-0047
(303) 236-6452

Phoenix Training Center
5050 N. 19th Avenue
Suite 300
Phoenix, AZ 85015
(602) 640-2651

BLM State Offices

Alaska State Office
222 West 7th Avenue, #13
Anchorage, AK 99513-7599
(907) 271-5555

Arizona State Office
3707 North 7th Street
Phoenix, AZ 85011
(602) 640-5504

California State Office
2800 Cottage Way, E-2841
Sacramento, CA 95825
(916) 978-4746

Colorado State Office
2850 Youngfield Street
Lakewood, CO 80215
(303) 239-3667

Eastern States Office
7450 Boston Blvd.
Springfield, VA 22153
(703) 440-1714

Idaho State Office
3380 Americana Terrace
Boise, ID 83706
(208) 384-3014

Montana State Office
222 North 32nd Street
Billings, MT 59107
(406) 255-2913

Nevada State Office
850 Harvard Way
Reno, NV 89520
(702) 785-6586

New Mexico State Office
1474 Rodeo Rd.
Santa Fe, NM 87505
(505) 438-7514

Oregon State Office
1300 NE 44th Avenue
Portland, OR 97213
(503) 280-7027

Utah State Office
324 South State Street
Salt Lake City, UT 84111-2303
(801) 539-4021

Wyoming State Office
PO Box 1828
2515 Warren Avenue
Cheyenne, WY 82003
(307) 775-6011

GLOSSARY OF ACRONYMS

ACEC	Areas of Critical Environmental Concern	IRM	Information Resources Management
ADP	Automated Data Processing	ISC	Interagency Scientific Committee
ALMRS	Automated Land and Mineral Record System	LMU	Logical Mining Units
ANGTS	Alaska Natural Gas Transportation System	LWCF	Land and Water Conservation Fund
APHIS	Animal and Plant Health Inspection Service	MLR	Management of Lands and Resources
ARPA	Archaeological Resources Protection Act of 1979	MMS	Minerals Management Service
ASAP	Automated System for Acquisition Processing	MOU	Memorandum of Understanding
AUM	Animal Unit Month	MW	Megawatts
BIA	Bureau of Indian Affairs	NEPA	National Environmental Policy Act
BIFC	Boise Interagency Fire Center (Now called the National Interagency Fire Center)	NHPA	National Historic Preservation Act of 1966
BLM	Bureau of Land Management	NICC	National Interagency Coordination Center
CFR	Code of Federal Regulations	NIFC	National Interagency Fire Center
EEO	Equal Employment Opportunity	NPS	National Park Service
EIS	Environmental Impact Statement	OHV	Off-Highway Vehicle
EPA	Environmental Protection Agency	OMB	Office of Management and Budget
ESO	Eastern States Office	PEF	Productivity Enhancement Fund
ESP	Experimental Stewardship Program	PPFS	Preprinted Forms System
FFS	Federal Financial System	PRLA	Preference Right Lease Applications
FLPMA	Federal Land Policy and Management Act	PTC	Phoenix Training Center
FOGRMA	Federal Oil and Gas Royalty Management Act	PV	Production Verification
FTE	Full-time equivalency	R&PP	Recreation and Public Purposes
FWS	Fish and Wildlife Service	RAPS	Resource Apprenticeship Program for Students
FY	Fiscal Year	RMP	Resource Management Plan
GAO	General Accounting Office	ROW's	Rights-of-way
GCRP	Global Change Research Program	SC	Service Center
GSA	General Services Administration	SMAT	Solid Minerals Assistance Teams
HACU	Hispanic Association of Colleges and Universities	TAMP	Texas Acquired Mineral Project
HBCU	Historically Black Colleges and Universities	TAPS	Trans-Alaska Pipeline System
HCA	Habitat Conservation Area	TQM	Total Quality Management
I&E	Inspection and Enforcement	TRRC	Texas Railroad Commission
IDEAS	Interior Department Electronic Acquisition System	WSA	Wilderness Study Area

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U.S. DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT
1400 S. ST. ANTHONY AVE., SUITE 100
DENVER, CO 80202

